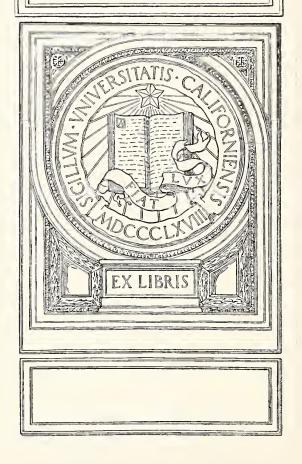


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CONSERVATION OF ESSENTIAL ELEMENTS IN PROTECTIVE FOODS

I. MINERALS

• Considerable differences may exist between the mineral contents of foods from both the qualitative and quantitative standpoints. In fact, variation in mineral content has been noted even in the same plant variety; such variations being dependent, among other factors, upon soil or climatic conditions (1).

A striking example of the influence of one of these actors is the relative richness in iodine of field crops raised in certain coastal regions of this country where the soil is also high in iodine.

From the point of view of those concerned with human nutrition, interest in the mineral content of the food supply is usually centered around calcium, iron and iodine; since it is generally agreed that of all the essential minerals, these are the ones most apt to be inadequately supplied by the average varied diet. Conservation of these minerals in foods is, therefore, a matter of considerable practical interest.

Unlike the vitamins, minerals are not lost during storage of fruits and vegetables. However, solution losses during cooking may be severe, due to the fact that most minerals, as they occur in the plant, are soluble, or at least are extractable, by the water in which they are cooked. For example, cabbage cooked by the usual home method has been shown to lose from 21 to

72 per cent of its calcium (2).

As exemplified by these studies, solution losses of minerals in leafy vegetables are usually high. Losses in vegetables as a class are not, however, so excessive, as indicated by an average reported loss of 19.5 per cent of the calcium in seven common vegetables (3).

The average decrease during cooking in the ash content of five common vegetables has been found to approximate 37 per cent (4).

While the extent of mineral loss during ordinary home cooking methods will vary with the particular element under consideration as well as the food in which it is contained, sufficient evidence is at hand to indicate that such losses may be considerable. It is further apparent that discarding the cooking water—the usual home practice—entails a loss of valuable, essential mineral components of food.

Modern practice in commercial canning goes far in preventing these solution losses of minerals. Canned foods are cooked by the heat process accorded them while still contained within the hermetically sealed can. A minimum of water is used which also remains within the can, conserving for the consumer's use those extractable essential mineral elements which may be lost to the cooking water during home preparation of market varieties of foods.

AMERICAN CAN COMPANY

230 Park Avenue, New York City

(1) 1936 J. Nutrition 11, 55.

(2) 1936 J. Home Econ. 28, 18. 1925 Ibid, 17, 265 (3) 1935 J. Home Econ. 27, 376 (4) 1917 Amer. J. Dis. Chila, 14, 34

This is the twentieth in a series of monthly articles, which will summarize, for your convenience, the conclusions about canned foods which authorities in nutritional research have reached. We want to make this series valuable to you, and so we ask your help. Will you tell us on a post card addressed to the American Can Company, New York, N. Y., what phases of canned foods knowledge are of greatest interest to you? Your suggestions will determine the subject matter of future articles.



The Seal of Acceptance denotes that the statements in this advertisement are acceptable to the Council on Foods of the American Medical Association.

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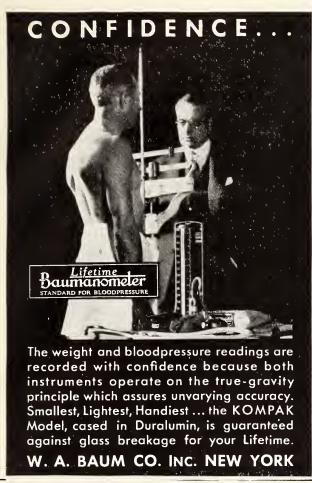
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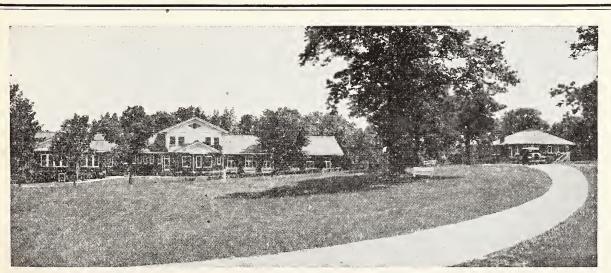
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BRONCHIAL OBSTRUCTION: ITS DIAGNOSIS AND TREATMENT*

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Any lesion or condition which leads to narrowing of the bronchial lumen, thereby interfering with bronchial drainage, may produce a bizarre train of symptoms. These symptoms usually arise because of the bronchiectatic state that develops as a sequence of bronchial obstruction. It is not the purpose of this paper, however, to discuss the general problem of bronchiectasis, but rather only that phase of it which develops in association with, or as a consequence of, bronchial obstruction.

It has been recognized for many years that bronchial obstruction leads to bronchiectasis. This fact, however, has not received the attention it deserves, and it has been only in the past two decades, with the more general use of the bronchoscope as a diagnostic aid, that its true clinical importance has been appreciated. Bronchial obstruction may develop from a great variety of causes. One of the most important and least recognized types of obstruction is that due to intrinsic inflammatory changes involving the bronchial wall. The bronchial tree is subject to many attacks of infection, as illustrated by the common cold and its attendant The changes that occur in the bronchi in association with such acute infections as measles, whooping cough, pneumonia and influenza are well known. As a result of such infections and inflammatory processes, localized changes may occur in the bronchial mucosa which may lead to localized fibrosis and narrowing of the bronchial lumen. It is selfevident, therefore, that owing to the structural nature of the bronchi, the smaller ones are more likely to be involved in such a process than the larger ones.

Another frequent cause of narrowing of the bronchial lumen is the development of atelectasis as a result of aspiration, following general anesthesia, of a plug of mucus, with consequent obstruction. In many cases this condition might be avoided if mucous plugs and secretions could be promptly aspirated and expelled following operation. Bronchoscopy is not always feasible or possible when this complication arises. A procedure I have found very valuable when atelectasis develops as a postoperative complication is to roll the patient on the side opposite to that in which atelectasis is present, lower the head of the bed, gently compress the side of the thorax involved, and, while also supporting the operative wound, have the patient cough. Very often the patient will expectorate a large plug of purulent secretion, with almost immediate improvement in symptoms.

The group of patients I wish especially to discuss are those whose bronchial obstruction is not complete, inasmuch as in those cases in which the obstruction is complete the symptoms are such that the true nature of the disease is readily appreciated. The clinical history of patients with partial bronchial obstruction is not always clear-cut and may be easily misinterpreted. In the majority of cases the history is that of a long period of chronic coughing of varying intensity, with or without expectoration. The symptoms may be so mild that the patient frequently disregards them. Suddenly, however, the patient will be seized with a chill and have a temperature varying from 101 to 103 degrees F. This fever usually lasts from two to five days and then subsides as rapidly as it appeared. Such attacks may occur as often as once a week, or as seldom as once a year. On questioning the patient closely one can usually elicit the fact that if ex-

^{*}Read before the meeting of the Golden Belt Medical Society, Topeka, Kansas, October 1, 1936.

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pectoration has been associated with the cough, it has subsided with the appearance of the chill and fever, only to reappear in an increased degree with cessation of the fever.

The stricture is usually of such caliber that the bronchial secretions can readily pass through it and be expelled. As a result of acute respiratory infection, fatigue, overwork, or increased nervous tension, swelling of the bronchial mucous membrane occurs, or the character of the secretion becomes altered so that it cannot escape through the stenotic bronchus, and it becomes dammed back, acting in the same manner as a pulmonary abscess. Generally two to five days are required for the inflammatory reaction to subside or for liquefaction of the infected material to take place. There is no doubt that in many of the cases of recurrent bronchopneumonia nothing more than this complication is present. While the clinical history of this syndrome is rather characteristic. the diagnosis may offer considerable difficulty, especially because of the sparcity of the physical findings.

The physical findings are necessarily dependent on the size of the bronchus involved, its location, and the degree and state of the obstruction. With an increasing degree of obstruction, atelectasis appears, with increasing dulness on percussion over the involved region. The auscultatory findings are subject to frequent and marked changes. With complete or almost complete obstruction of the bronchus there will be absence of breath sounds, one of the most valuable diagnostic signs of bronchial obstruction. With incomplete obstruction and the presence of secretion in the bronchus, there will be scattered coarse râles over the involved region. Should the bronchiectatic pocket be completely evacuated, the auscultatory findings would be normal. Because of the fluctuation in physical signs it is imperative that the chest be examined at frequent intervals when bronchial stenosis is suspected.

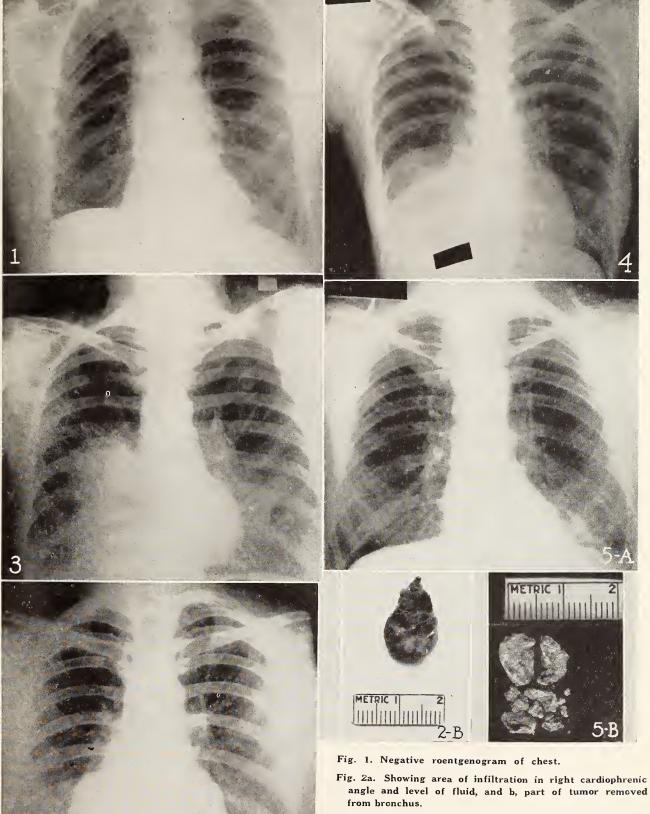
Roentgenographic examination of the thorax may be of the greatest diagnostic importance. It must, however, be recalled that a small zone of involvement located behind the heart shadow may be readily overlooked. Examination of the blood with special reference to the leukocyte count may be of value in calling attention to the lung as a possible source of difficulty. With the development of bronchial obstruction there is usually an increase in the leukocyte count.

The use of lipiodol deserves consideration. It may be a definite aid in the diagnosis and localization of bronchial obstruction. It must be emphasized, however, that care must be exercised in the interpretation of the roentgenograms, as a negative examination does not necessarily rule out the possibility of such obstruction. Should a bronchus be completely obstructed, the lipiodol will not flow into the involved region but only outline the normal bronchi, thereby conveying the impression of a normal bronchial tree. Furthermore, tenacious secretion may cling to the bronchial wall and the lipiodol may flow about it, conveying the false impression of a narrowed bronchus.

Once bronchial obstruction is suspected, the only clinical method by which the diagnosis can be accurately established is by means of bronchoscopy. This procedure is not only of importance in establishing the diagnosis, but is also of great value in determining the underlying etiology. In addition, many such strictures may be dilated through the bronchoscope, affording marked clinical improvement.

The manner in which bronchial stenosis of an inflammatory nature may act, and its response to treatment, is illustrated in the following case:

The patient, a man aged sixty-three years, first came to the clinic in 1928. complaining of recurrent episodes of chills, fever, and coughing. He said that his difficulty had begun forty-eight years previously following an attack of pneumonia. About three or four times a year, as a result of a cold, fatigue, worry or anger, he would become drowsy, general malise would develop, and he would have a severe chill followed by a temperature of 100 to 104 degrees F. and a dry hacking cough; this would last three or four days and confine him to bed. Toward the end of these attacks he would begin to raise tenacious, thick, purulent sputum and his symptoms would then subside. In recent years the attacks had become more frequent, so that he was having about one a month; they would incapacitate him for a week at a time, consequently interfering considerably with his work. A diagnosis of possible bronchiectasis with improper drainage had been made some years previously, but nothing had been accomplished from a therapeutic standpoint.



angle and level of fluid, and b, part of tumor removed

Fig. 3. Pulmonary tuberculosis with bronchial involvement.

Fig. 4. Pulmonary suppuration occurring as the result of an aspirated tooth.

Fig. 5a. Bronchiectasis associated with pulmonary stone, and b, pulmenary stone removed from bronchus.

At the time of examination at the clinic the patient appeared tired and undernourished; he had a temperature of 101.5 degrees F. Physical examination of the thorax revealed a few scattered, inconstant coarse râles over the right base; otherwise the examination gave essentially negative results. Roentgenographic examination of the thorax failed to reveal anything of diagnostic importance (Fig. 1). Repeated examinations of the sputum failed to reveal tubercle bacilli, and the leukocyte count was 7000 per cubic millimeter of blood.

In view of the clinical history and the suspicion of bronchial stenosis, bronchoscopy was performed. The bronchus to the middle lobe was found to be moderately stenosed and a small amount of pus exuded through the opening. The stenotic area was thoroughly dilated and the purulent material was aspirated. The patient has remained free of symptoms since then except for an occasional day when he feels he might have trouble; such trouble, however, never materializes. He has gained thirty pounds (13.6 kg.) and feels better in every respect.

There are, of course, many other conditions which may lead to impingement on the bronchial lumen, and among these one of the most important is primary carcinoma of the bronchus. This is especially important in view of the increasing incidence of this disease.

Primary carcinoma of the bronchus may roughly be divided into two main groups: (1) squamous-cell carcinoma, and (2) adenocarcinoma. The first type is more resistant to treatment and, if relief is to be hoped for, the diagnosis must be made early; surgical treatment in these cases would seem to offer the greatest hope for cure. Adenocarcinomas, on the other hand, may be divided into two subgroups. There is disagreement among pathologists as to whether all adenocarcinomas are malignant. Not being a pathologist it is impossible for me to settle the problem insofar as the pathology is concerned, but I do know that, clinically, there is a distinct difference in the course of the two tumors and in their response to treatment. The so-called adenoma group responds very well to surgical diathermy and to radium and roentgen treatment. Because of the uncertainty in classifying these tumors

it would seem that the patients should be given the benefit of the doubt and that the conservative type of treatment should be employed before subjecting them to a radical and highlydangerous operative procedure.

The manner in which such tumors behave and respond to treatment is well illustrated by the following case:

The patient, a man twenty-five years of age, first came under observation in March 1935. He had first begun to have trouble three years previously, and this had consisted of a mild, nonproductive cough. Five months after the onset of symptoms he began to raise a slight amount of sputum and at the same time began to have episodes of chills and fever which lasted from two to five days. His temperature would fluctuate between 103 and 105 degrees F. during these attacks. Because of these symptoms a diagnosis of pulmonary tuberculosis was made and the patient was sent to a tuberculosis sanatorium. At no time were tubercle bacilli found in the sputum. With rest there was decided improvement in the patient's general condition, although he still continued to have the original symptoms. A month before his admission to the clinic for the first time he began to raise blood and it was suspected that he might be suffering from a pulmonary abscess.

On examination at the clinic the patient appeared to be in fairly good condition. He had a chronic productive cough. Physical examination of the thorax revealed increased dulness over the right base along the costovertebral border on percussion, with an absence of breath sounds. Roentgenoscopic examination of the thorax revealed a dense shadow along the right border of the heart extending to the hilus, with a fluid level at its upper margin (Fig. 2a). Repeated examinations of the sputum failed to reveal acidfast organisms. A tentative diagnosis of pulmonary abscess was made and bronchoscopy was advised.

On bronchoscopy, a large tumor was found filling the bronchus to the right lower lobe and a large amount of pus was seen exuding from around the growth. Tissue removed revealed adenocarcinoma,

grade 1. With surgical diathermy and forceps a large portion of the tumor was removed, the remainder being destroyed (Fig. 2b). The patient has remained free of symptoms up to the present time and has gained twenty-five pounds (11.3 kg.)

The possibility of tuberculosis must always be considered in cases of any unusual pulmonary disturbance. This applies to basal lesions as well as those involving the apex of the lung. Failure to keep this fact constantly in mind may lead to considerable embarrassment, and the necessity for repeated examinations of the sputum in all cases of pulmonary disease should be emphasized. There are times, however, when the diagnosis of tuberculosis cannot be established without bronchoscopic aid. Tuberculosis may produce narrowing of the bronchial lumen, and the lesion may vary from a smooth, nonulcerating stenosing lesion up to an extensive ulcerative mass that may closely simulate either carcinoma or granulation tissue. At times the diagnosis can be established by taking direct smears from the lesion and examining them for tuberculosis; at other times, however, it is necessary to remove tissue for microscopic examination.

An instance of this type is well illustrated in the following case:

A woman, forty-three years of age, first began to suffer from dyspnea two years before coming to the clinic. The dyspnea gradually increased in severity and the patient began to cough and to suffer from attacks of fever. At no time did she raise any appreciable amount of sputum.

The patient appeared well and on physical examination of the thorax nothing diagnostic was found. Examinations of sputum for tuberculosis failed to reveal acid-fast organisms. A roentgenogram of the thorax revealed infiltration in both cardiophrenic angles (Fig. 3). Because of these findings bronchoscopy was performed and the right main bronchus was found to be stenosed below the origin of the branch to the upper lobe. Tissue scraped from the wall of the lesion on microscopic examination revealed the presence of tuberculosis. The patient was placed in a tuberculosis sanatorium and made an excellent recovery.

The possibility of an underlying foreign body must also be entertained in any case of unexplained pulmonary suppuration. It is surprising the type, size and nature of foreign bodies that may be found in the bronchus, the aspiration of which the patient has no recollection. Foreign bodies permitted to remain in a bronchus over any length of time tend to produce bronchial stenosis at the point of obstruction, with suppuration distal to this point.

There is probably no type of pulmonary suppuration that subsides as rapidly as that which follows removal of a foreign body. This is well illustrated in the following case:

The patient, a woman forty years of age, came to the clinic because of exophthalmic goiter. The history, however, was unusual in that there had been recurrent episodes of fever and a constant cough. These symptoms had been assumed to be due to pressure of the goiter on the windpipe. While the patient was found to have definite exophthalmic goiter, it was also found that there was dulness over the base of the left lung, posteriorly, and that the breath sounds were absent. Roentgenograms of the thorax confirmed the physical findings (Fig. 4). Bronchoscopy was performed after the patient had been given compound solution of iodide (Lugol's solution). On examination a stricture was found in the bronchus to the left lower lobe; this was dilated and pus was aspirated. The patient improved sufficiently to permit thyroidectomy. Shortly after the operation there was a recurrence of pulmonary symptoms and the bronchus was again dilated. Soon after this the patient coughed out a tooth which had been aspirated a year previously. With the expectoration of this tooth there was subsidence of the pulmonary symptoms.

It is frequently overlooked that the body has the faculty of forming its own foreign bodies. These consist primarily of calcified bronchial lymph nodes which have ulcerated through into the lumen of the bronchus. When this occurs the same clinical picture may develop as follows aspiration of a foreign body. The following case illustrates such an occurrence:

The patient, an adult male, had always

enjoyed the best of health until eight months before coming to the clinic. At that time he had suffered from an attack of fever and general malaise that was thought to be influenza. Since that time he had a chronic persistent cough with expectoration of purulent material.

On examination of the thorax he was found to have scattered coarse râles over the base of the left lung, posteriorly. Examination of the sputum failed to reveal tubercle bacilli. Roentgenograms of the thorax showed bronchiectasis of the left base (Fig. 5a), and on careful examination a signet-shaped shadow was noted along the left border of the heart. The possibility of pulmonary stone was considered and bronchoscopy was advised. On bronchoscopic examination a calcareous mass was found obstructing the lumen of the bronchus to the left lower lobe. This was removed without difficulty with immediate relief to the patient's symptoms. (Fig. 5b).

There are, of course, many other conditions which may produce bronchial obstruction and lead to the development of the train of symptoms described and which must be considered in each individual case. However, such conditions are not as common as the conditions just described and they will therefore not be discussed at this time.

It can be stated that any patient with bronchial obstruction, with or without evidence of pulmonary suppuration, for whom the diagnosis is not definite, should be given the benefit of bronchoscopic examination. This procedure is not only of value in establishing the underlying etiology, but may be of considerable value also from the therapeutic standpoint.

The woman about to become a mother or with a newborn infant upon her bosom, should be the object of trembling care and sympathy wherever she bears her tender burden, or stretches her aching limbs. The very outcast of the streets has pity upon her sister in degradation, when the seal of promised maternity is impressed upon her. The remorseless vengeance of the law brought down upon its victims by a machinery as sure as destiny, is arrested in its fall at a word which reveals her transient claim for mercy. The solemn prayer of the liturgy singles out her sorrows from the multiplied trials of life, to plead for her in her hour of peril. God forbid that any member of the profession to which she trusts her life doubly precious at that eventful period, should hazard it negligently, unadvisedly or selfishly.—Oliver Wendell Holmes.

VASCULAR DISTURBANCES OF THE LOWER EXTREMITIES*

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Kansas City, Missouri

Obviously it would be impossible to give even an outline on such a subject in the time alloted to this paper. Such a discussion would include the subjects of aneurysm, varicose veins, ulcers and many others. Therefore one proposes only to consider gangrene of the lower extremities, especially in the occlusive diseases.

Gangrene may occur in the lower extremities from vaso-motor disturbances or functional ischemias, for example Raynaud's disease, or from organic ischemias, as found in senile arteriosclerosis (including diabetic gangrene) and thrombo-angiitis obliterans. It is only these obliterative diseases which will be discussed.

Buerger first described the pathological findings in an occlusive disease of the lower extremities and called it thrombo-angiitis obliterans. Previously this disease had been given various names, but the one most commonly accepted in the literature was endarteritis obliterans.

In this disease both veins and arteries show an extensive obliteration. At times there is more involvement of the veins than the arteries. There is a periarteritis. The veins, arteries and accompanying nerves may be so firmly bound together that individual dissection of any one of them is difficult. This involvement of the nerves explains the extreme pain suffered by some patients. Buerger1 says, "In short the lesions of thrombo-angiitis obliterans are in chronological order, and acute inflammatory lesion with occlusive thrombosis, the formation of military giant cell foci, the stage of organization and canalization of the clot, the disappearance of the inflammatory products and the development of fibrotic tissue in the adventitia which binds together the artery vein and nerve''.

It has been generally accepted that most cases of thrombo-angiitis obliterans are among Jews. However it is found among other races. Many cases have been reported among Swedes and more especially among the Japanese. At the Mayo Clinic² a decreasing frequency has been noted among the Jews and an increasing frequency among Gentiles. Their cases have

^{*}Presented before the Fall Clinical Conference of the Kansas City Southwest Clinical Society, Kansas City, Missouri, October 10, 1935.

largely come from western, southern and midwestern states.

The disease is one of middle life and is confined almost exclusively to males. There is probably no other disease, except hemophilia, that is so definitely confined to this sex. This is in contrast to Raynaud's disease, which occurs mostly among women.

There appears to be no difference in the extremity affected. As a matter of fact it is often present in both extremities, but because of the severity of the symptoms of one side the disease is overlooked in the fellow member.

It is commonly conceded that tobacco plays an important role in the causation. Tobacco is a vaso-constrictor. In the vast majority of thrombo-angiitis cases the patients have been heavy tobacco users. However it is doubtful if tobacco is the real etiological factor. The cause of the disease is not known, but there is much proof that some form of infection is the causative agent.

McGrath³ experimentally produced gangrene in white female and male rats. Ergotamine tartrate was administered in doses of from twenty-five mg. to one hundred mg. per kilogram of weight. In both sexes a uniform irregular gangrene appeared in the ends of the tails in from ten to twenty-eight days. The histological picture was similar to that of thromboangiitis obliterans. He does not claim that he has produced a true thrombo-angiitis obliterans, but he has obtained a lesion comparable to it. He also showed that female rats when given sufficient theelin did not develop gangrene. His experiments promise a new approach for study of this subject.

In seventy-one per cent of cases at the Mayo Clinic, cold was the first symptom noted. A very early complaint is cramps in the foot. Therefore the patient often first consults a chiropodist, or because he feels that he has fallen arches goes to an orthopedist. Soon a color change is noted in the foot. The skin is blanched on elevation and becomes red when in a dependent position. Often the skin feels cold. Pain is present in the calves of the leg after exercise. After walking a few blocks this pain (intermittent claudication) appears and is relieved by resting. Ulcers may appear on the toes. Later in the disease there is pain when the leg is at rest, the so called rest pain. This pain at times is so severe that the patient can not sleep and as a result he loses much weight. A superficial phlebitis is often observed. Finally the foot becomes edematous and lastly frank gangrene appears.

In examining a patient with suspected occlusion of a vessel, inspection is of great value. It will be noted in such a case, on elevating the foot there is a rapid blanching of the skin, and when the foot is in a dependent position that there is rubor or even cyanosis. The foot may be edematous. A phlebitis may be evident. Palpation of the main vessels to determine their patency is of the greatest value. Brown⁴ states that a diagnosis between occlusive and vasomotor disturbances can be made in ninety-five percent of cases simply by determining by palpation the pulsation in the four principal arteries of the leg.

Roentgenographic visualization of the arteries and the veins is rendered possible by the injection of opaque substances. One of the most commonly used is thorium dioxide or thorotrast. Veal and McFetridge⁵ have recently reported their results after using thorotrast. They have had no bad results from its use and believe that it is of value in determining the level for amputation. However, after large doses of thorotrast serious effects, years after injection, have been reported. The injection of this substance causes pain and an anesthetic is required. For the average general surgeon or roentgenologist its use is questionable. X-ray plates are of value in differentiating thrombo-angiitis obliterans from arteriosclerotic disease. In the latter calcification of the vessels is demonstrable.

The oscillometer may be of value in early diagnosis. However it has to be used with especial technique and is not necessary for diagnosis. To the average practitioner its use is not practical.

Many classifications of thrombo-angiitis obliterans, from a clinical standpoint, have been suggested. The classification of Brown is satisfactory. He has divided these cases into five types:

- "1. In the compensated type collateral circulation has developed and the disease has been of long duration.
- 2. In the slowly progressive type signs and symptoms of arterial occlusion are present. The surface temperature is lowered and there is pain.
- 3. Limited areas of gangrene are present with superficial ulcers of the digits.

The collateral circulation is almost adequate. The patient has rest pain.

- 4. In the acute progressive type there is extensive arterial occlusion. The patient has severe claudication and rest pain accompanied by ulceration and gangrene.
- 5. The extreme type is characterized by massive gangrene".

Arteriosclerotic gangrene occurs in older people, mostly fifty-five to seventy years of age. Either sex may be affected and only one extremity is involved at a time. As mentioned above there is calcification of the vessels as shown by x-ray plates and palpation. There is little vasomotor disturbance. Little attempt is made to establish collateral circulation. Pain without ulceration is common. Ulceration about the toenails and gangrene of the digits may be present.

In diabetic gangrene glycosuria is present. The diabetic has a greater tendency to develop collateral circulation than the arteriosclerotic individual. He is more prone to infection and the greatest of care must be taken for its prevention. All trauma is carefully guarded against.

Raynaud's disease might be confused with the occlusive diseases. Raynaud's disease occurs mostly among women and is bilateral. There are intermittent attacks between which the member is normal in color. The real differentiating factor between this and occlusive disease is that in Raynaud's disease the peripheral vessels pulsate normally.

The treatment of these occlusive diseases may be conservative or amputation. There is no specific cure. Perlow⁶ observes all early cases of thrombo-angiitis obliterans in a hospital for four weeks. His patients are given rest, contrast baths, Buerger's exercises, baking, careful hygienic care of the member affected and no tobacco is allowed. Diathermy from one to three hours is given twice weekly. If the patient is improving under this plan at the end of four weeks it is continued. If not, more radical treatment is instituted.

In the early treatment it is necessary to avoid the dangers of infection. The patient is instructed in the foot bath and the application of oil or alcohol after the bath. They are not permitted the use of tobacco. The member must be kept warm and not subjected to sudden changes of temperature. Greatest care must be taken to prevent trauma. The drinking of large quantities of fluids (at least four quarts daily) is encouraged. Benefit is derived from hyperemic treatments, but massage is harmful. The use of a tourniquet is dangerous.

Vaso-dilator drugs as acetylcholine are of value. Pancreatic extract has been given with good results for the pain of claudication.

Schwartzman⁷ has used muscle extract in over one hundred cases. He thinks it is of benefit in gradually establishing a collateral circulation. The extract should be given over a long period of time and in large doses. It has been especially beneficial in lessening rest pain. The extract is given by hypodermic and may be given intramuscularly. He attributed the failures he had in its use to the low potency of the extract used.

Leriche several years ago advised the stripping the adventitia from the wall of the main vessel, usually the femoral. This was done to sever the sympathetic nerve supply of the vessel and hence produce a dilatation. The operation has not been generally successful and for the most part has been discarded.

Ganglionectomy in selected cases has been of value. Deep x-ray treatment of the lumbar sympathetic chains has given improvement. The operation of ganglionectomy is not simple and benefits from its use are uncertain.

Ligation of the main vein has been advocated. Claims have been made that this procedure increases both the blood pressure and blood volume in the affected member. Wilson⁸ has studied the effects of ligating the main vein in the extremities. His experiments have not supported the current belief that ligation of the main vein diminishes the incidence of gangrene after ligation of the main artery. Ligation of the vein at a higher level than that of the artery increased both the incidence and the extent of the gangrene according to his work.

Typhoid vaccine has been given to increase the peripheral circulation. It is given intravenously beginning with a dose of 25,000,000. About ten injections are given at intervals of five to seven days. It has given relief for pain. It is contraindicated in severe arteriosclerosis, myocarditis and hypertension.

Allen⁹ has reported a system of exercises which he successfully uses. The leg is elevated to forty-five degrees for a time not longer than to blanch the foot. The patient then sits on the edge of the bed with the foot down until cyanosis or pain appear. He is then instructed

to forcibly dorsiflex, plantarflex, evert and invert the foot and also flex and extend the toes. This is followed by a rest period of five minutes with the extremities wrapped in a warm blanket. These exercises are repeated three to six times each session and two to four sessions are given daily.

Reid and Hermann¹⁰ have described "Pavex" treatments, which they have used in over three hundred patients with thrombo-angiitis obliterans. It is a method for producing hyperemia by alternate positive and negative pressures given by a mechanical apparatus. They feel that it has been of especial value in treating patients suffering from a sudden occlusion. Acute phlebitis is a contraindication for the use of this method of treatment.

Regardless of treatment and care of early cases of these occlusive diseases many cases will of necessity come to amputation. About 80 per cent of early cases of thrombo-angiitis obliterans can be treated medically. These patients are more resistant to infection than arteriosclerotic individuals.

McKittrick¹¹ says that major amputation is indicated:

- "1. Severe pain is not controlled by hospital treatment.
- 2. When there is gangrene of the digits without pulsation of the dorsalis pedis.
- 3. Gangrene of the digits when there is a definite level of temperature or color change with the foot in dependent position".

Arteriosclerotic gangrene calls for a higher amputation than thrombo-angiitis obliterans. The following table gives in part, McKittrick's results.

	Thrombo-		
	angiitis	Arterio-	
	obliterans	sclerotic	Diabetic
	31 cases	35 cases	124 cases
Amputation of toes	54.7 %	14.3 %	5.6%
Amputation lower leg	6.4%	2.8%	12.1%
Amputation thigh	. 3. %	51.4%	60.5%

In conclusion one wishes to stress the following points:

- 1. Early diagnosis of occlusive diseases followed by intelligent treatment will greatly contribute to the comfort of these sufferers and will reduce the incidence of gangrene.
- 2. An early diagnosis can be made in most cases without mechanical apparatus.
- 3. While there is no specific treatment, yet many agents may be employed to give relief

from symptoms and prevent high amputation, and even give complete remission of symptoms.

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CARDIAC PAIN*

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At this present day especially, the complaint of "pain in or over the heart" is probably one of the most frequent symptoms encountered in general practice. It ranges in intensity from the slight precordial discomfort attending an emotional anxiety to the severe distress of coronary thrombosis. It doubtless is caused not only by pathology in the cardio-vascular system, but also by abnormal states of the nervous system, both cerebrospinal and vegetative. An association between altered cardiac sensation and grief or other psychic depression has long been recognized and poetically called a broken or heavy heart. Likewise the feeling of mental elation has given rise to the expression of light-hearted-

In this discussion I have chosen to follow the classification of White and Wood, as follows:

- I. Simple fatigue pain.
 - A. Chronic hypertension.
 - B. Aortic stenosis or regurgitation.
 - C. Mitral stenosis.
- D. Pulmonic stenosis congenital heart disease.
 - E. Adherent pericarditis.
- F. Paroxymal tachyrardia, or paroxysmal auricular flutter, or fibrillation.

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G. Permanent fibrillation, or flutter, or high ventricular rate.

H. Permanent coronary narrowing due to arteriosclerosis.

II. Nervous heart pain, including effort syndrome.

III. Paroxysmal heart pain (probably of coronary disease or irritability) the so-called true angina pectoris.

IV. Pain of coronary thrombosis.

V. Aortic pain, of syphilitic aortis and aneurysm.

VI. Pain of pericarditis.

To this classification it seems advisable to add "Pain of Rheumatic Fever".

Frequently, combinations of these factors occur.

Combs reports some cases in which he feels precordial pain was due to pernicious anemia.

Turner reports a case of cardiac pain which was brought on by insulin shock in a diabetic. He advises that it is necessary to proceed cautiously with insulin in diabetics who may have coronary sclerosis, lest unfortunate consequences from insulin shock result.

I. SIMPLE FATIGUE PAIN

A great majority of heart pains are undoubtedly due to muscle fatigue, since any muscle, when exhausted, tends to be painful. A number of factors may enter into this pain. It may occur in case of the hypertrophied hearts of chronic hypertension or of aortic regurgitation or aortic stenosis or of adherent pericarditis as a sign largely of left ventricular fatigue. It may occur in the case of the hypertrophied hearts of chronic and well marked mitral stenosis or congenital pulmonic stenosis as a sign of right ventricular fatigue. O'hare, in a recent analysis of a hundred cases of essential or vascular hypertension, says that in these patients, "cardiac pain is most commonly present as a dull ache in the region of the apex and lower precordia. Pain at the base of the heart, apart from the classical angina pectoris, is less common. Typical angina occurred in only three of our cases". This has also been the experience of White and Wood.

White and Wood continue by saying that uncomplicated mitral stenosis may or may not give rise to precordial pains and aches. Such discomfort comes mostly on exertion and is apt to be brief and sharp, but sometimes is a dull ache. It has been present in about half of their cases of well marked uncomplicated

mitral stenosis. It has not been right-sided. With complications such as auricular fibrillation, congestive failure, marked nervousness, or further valve lesions precordial pain is found more frequently, but by no means constantly, aortic regurgitation, aortic stenosis and pulmonary stenosis similarly may or may not be attended by heart pain, precordial in position.

Fatigue pain may sometimes occur in arteriosclerotic heart disease where the coronary arteries are so narrowed permanently that the myocardium is insufficiently nourished with blood, a sign of fatigue of either, or often of both ventricles. This does not include true angina pectoris, although in the past the two types have been confused.

Fatigue pain may also result from the added effort due to paroxysmal tachycardia or paroxysmal auricular fibrillation or flutter (causes of many cases of so-called acute dilitation), or permanent fibrillation or flutter when the ventricular rate is not under digitalis control. It may occur with congestive failure, no matter what the cause, and in fact, taken by itself in the presence of some one of the structural lesions or functional disturbances mentioned above (and in the absence of excessive nervous irritability), this type of heart pain probably should be regarded as an early symptom of the so-called congestive type of failure, which may not advance beyond this point. Confirmation of this fact lies in the observation that either rest or digitalis decreases or abolishes this type of heart pain.

It must always be remembered that the more sensitive the nervous system of the individual, the lower the threshold and the less the abnormality needed to produce pain. This undoubtedly is one reason for the different reactions in symptomatology in different individuals afflicted with apparently the same pathological condition. There would seem to be other cause or causes for the variable occurrence of heart pain of which we know little or nothing at present.

II. NERVOUS HEART PAIN

Just how far the heart pain of effort syndrome may be included under the heading of the fatigue type is uncertain. It seems more likely that it should be classed separately. In the absence of extreme over-exertion it is found in nervous, high-strung individuals, old or young, but more likely the latter. It is the result of excitement as often as of effort. It

would seem to be the result of over-action of the heart in a person with a low sensory threshold. Then, too, there is an exaggeration of the importance of even a slight pain if it happens to be in the region of the heart, particularly if the physician consulted by the patient is also doubtful about it or considers it definite evidence of heart trouble.

Mackenzie writes, "The majority of these cases are highly strung nervous people, especially women. They have frequently been exposed to some strain, mental or physical, and their cardiac symptoms may be but a part of the manifestation of ill health. We find such symptoms frequently at the meopause or when the patient is subject to some other complaint, as intestinal stasis or poisoning from some microbic infection. I have watched such individuals for over twenty years".

During the war there were many thousands of such patients in every army, most of them inheriting a sensitive nervous system and further depressed by fatigue, hardship, and infectious disease. Even the most robust soldier, however, if enough exhausted, may show symptoms.

There seems at times to be some definite connection between the glands of internal secretion and irritable heart pain. White and Wood have seen three women who for years had suffered from heart pain following double oophorectomy. In all three considerable relief followed the administration of ovarian extract.

Both the ordinary fatigue pain and that of nervous heart vary much in intensity. The pain is usually a precordial ache, but it may at times become a sharp and knife-like stab in the precordia, with radiation to the back, left shoulder, axilla, and down the left arm to the finger tips and even to the right side of the body. In the case of fatigue pain, exertion is practically always the exciting factor. In the case of so-called nervous heart, or effort syndrome, excitement may cause more pain than effort. While rest and digitalis act to relieve or diminish the likelihood of the fatigue pain. reassurance and nerve sedatives act best in the case of the "nervous heart" pain. Nitroglycerin is of no avail.

III. PAROXYSMAL HEART PAIN, OR ANGINA PECTORIS

White and Wood write, "Although we do not yet know the mechanism of the production of angina pectoris, it is a definite symptom of heart disease and should be classed separately".

They think that it is likely that coronary irritability causes paroxysmal heart pain by giving rise to coronary spasm, and thus an acute anemia and acute exhaustion of the myocardium. That there need be no extensive arteriosclerosis, nor possibly any microscopic pathologic condition at all. Also, that the condition may be an early sign of coronary disease, there being for many years vessels just diseased or irritable enough to produce the paroxysmal pain.

Edward Jenner sponsored the hypothesis that coronary sclerosis was the cause of angina pectoris. Sir Clifford Allbutt believed that the aorta was the seat of the pain production. Sir James Mackenzie taught that the pain arose from myocardinal exhaustion. Some clinical men adopted a compromise view, attributing the pain to aortic disease, but believing that the prognosis depended on the condition of the coronary vessels.

In 1928 Keefer and Resnik published a theory which seems to clarify the subject of angina pectoris. Through careful analysis of both their own and reported autopsy cases, they found that in those patients who during life had had typical angina pectoris, practically always there was present at autopsy one or more of three lesions: 1. Sclerosis of the coronary vessels. 2. Occlusion of the mouth of one of the coronary arteries. 3. Insufficiency of the aortic valves. These men, on reviewing some experimental studies, found that these agreed in indicating that the flow of blood through the coronary arteries was dependent on diastolic blood pressure. It was a low diastolic pressure, the coronary flow was diminished and direct experimental evidence for this proposition was quoted. It was so shown that all angina pectoris victims had one basic condition in common, a failure of the oxygen supply to keep pace with the oxygen demand of the heart.

These men emphasize another fact, which is the likelihood of sudden death in this condition. The same lack of oxygen which produces the pain may cause fibrillary contraction of the ventricles, resulting in death.

Paroxysmal heart pain, may be brought on in susceptible hearts of older people by any stimulus, whether exertion, excitement, cold air, food in stomach, or gas in the bowels, and, when more severe, may occur when the person is quiet in bed without an obvious exciting factor. It is essentially of paroxysmal nature without pulse disturbance, substernal or precordial in spite of origin and dramatically relieved by nitrites and not by digitalis. It is important to remember that pain and not disturbed rhythm is characteristic of this condition.

They point out that angina pectoris is a relatively rare finding in large public hospitals, since it is more a condition induced by the nervous strain of business and professional life.

Mackenzie has written, "It is a well recognized fact that seemingly identical lesions of the heart give rise to different phenomena in different individuals. This difference is seen expecially in the reaction of different individuals to pain—producing stimuli. It is probably because of this individual peculiarity that we find angina pectoris the expression of a grave lesion in others, while in many pain is absent in even the most advanced cases of disease and heart failure. Experience has taught me to look on angina pectoris from a twofold aspect, an expression of cardiac exhaustion and also an expression of a susceptible nervous system".

Estimation of the nervous irritability of the patient is thus of great importance in judgment of the symptom of heart pain.

Radiation of heart pain depends largely on the intensity of the pain. The more severe the pain the greater its radiation. Since the paroxysmal pain of angina pectoris is apt to be the more severe type of heart pain, its radiation tends to be greatest. At times, even in other types of heart pain, of little consequence as far as life is concerned, the pain may be severe enough to radiate to the finger tips.

IV. PAIN OF CORONARY THROMOSIS

Rapid blocking of a large coronary vessel, usually a thrombosis of a sclerosed artery, is generally accompanied by long continued heart pain of a very severe nature. Morphine in large repeated doses is necessary to control the pain, there being no relief from rest, digitalis or nitrites. As a rule, the pain is precordial or substernal, but occasionally it is abdominal, particularly epigastric, or right or left hypocondrial. In such cases where it is abdominal it may be confused with an acute abdominal condition, such as gallstone colic or perforation of a peptic ulcer. Recovery may occur in spite of the extreme pain and gravity of the condition.

V. AORTIC PAIN

In syphilitic aortitis and aneurysm there is a fairly characteristic dull substernal pain or ache, at times increased to a sharp pain and even radiating, but not paroxysmal. Antisyphilitic treatment tends to give relief, while rest, digitalis or nitroglycerin fail to obtain response. Potassium iodide may have gained some of its reputation because of its action in these cases. It must not be overlooked, that in syphilitic aortitis, in addition to the aortic pain, involvement of the coronary arteries may give rise apparently to the typical paroxysmal pain of coronary disease.

VI. PAIN IN PERICARDITIS (AND OF HEPATIC ENGORGEMENT)

There are also the transient pains of acute fibrinous pericarditis, (and the epigastric and right hypochondrial distress of engorgement of the liver due to congestive cardiac failure), which are generally easily recognized.

Strumpell says, "Pain may be felt in the cardiac region and often in the epigastrium, but is absent in many cases. Dyspnea and pectoral distress are almost constant".

Hirschfelder considers precordial pain the most striking symptom in simple fibrinous pericarditis. Pick and Heck say, "Pericarditis usually causes discomfort which is localized in the region of the heart and is described as pressure. Pronounced pain may be present radiating to the arms and shoulders. Epigastric pains have also been observed". Musser writes, "Pain is frequently present; it may be lancinating, dull or heavy, localized in the fourth and fifth spaces or referred like angina pectoris, but modified by pressure". Norris and Landis advise, "The pain may be entirely absent or may be of a very sharp, stabbing character. Usually it is felt over the heart, but it may radiate in the abdomen, to the left side of the neck or shoulder. Often it is increased by movement, deep breath, or cough. Tenderness may be elicited by pressure in the region of the apex. Also there may be a feeling of oppression or tension in the precordium".

Mackenzie, however, says, "Dry pericarditis is essentially a painless complaint. This curious painlessness has long puzzled me, when pains are associated with pericarditis it will invariably be found that there is evidence of myocardial affection".

Allbutt describes pericarditis by saying. "There may be neither sign or symptom.

Usually the patient complains of a dull, wearisome ache rather than an acute pain. In other cases the distress varies from a slight discomfort to a severe pain, aggravated by movement, deep inspiration or cough. It may be seated in the epigastrium or reflected towards the neck and shoulder blade and shoulder. Finally the pain may be retrosternal, expecially in the angino-form attacks. If the phrenic nerve be engaged, two tender points may be observed, one over the sternomastoid muscle, the other at the xiphoid. Not infrequently there is pain on swallowing".

VII. PAIN OF RHEUMATIC FEVER

Swift and Hitchcock draw the following conclusions from their investigations on cardiac pain in rheumatic fever. The syndrome of precordial pain and hyperesthesia was often encountered in patients with rheumatic fever. The frequency of the syndrome being roughly proportional to the intensity of the infection. It was found in a higher percentage of patients in their second and subsequent attack than in the first.

Two-thirds of the patients with precordial pain presented concomitantly other evidence of cardiac involvement, and almost all of the remainder showed similar evidence of cardiac involvement sometime during the period of infection.

Permanent valvular injury was more prevalent among those having precordial pain during the acute infection than among those not having pain. While freedom from cardiac pain did not insure freedom from cardiac involvement, the great frequency with which the two were encountered together indicates that cardiac pain manifested by a patient with rheumatic fever should be regarded by the physician as a special indication for treatment calculated to safeguard the heart.

Nerve Supply and Mechanism of Referred Pain: Strong describes the nerve supply in the following manner. The heart receives its nerves from two sources, the vagus and the sympathetic, and to the heart as to any other viscus there is an afferent as well as an efferent supply. Because the afferent supply to the heart has not received the same consideration given to the efferent nerves, our knowledge of these centripital fibers is comparatively vague.

The sympathetic nerves to the heart arise from the last cervical and first four dorsal anterior roots, the white rami communicantes

passing to the stellate and corresponding sympathetic ganglia, from there some of them proceeding up the cervical sympathetic trunk to the inferior, middle and higher to the superior cervical ganglion. From these ganglia, which contain the sympathetic cell bodies, the medullated fibres rise which run to the heart, where they pass directly to the muscle cells without the intervention of other nerve cells. This is quite different from the case of the vagus, where the cardiac branches communicate with the heart muscle only through the intervention of the cells of the intrinsic cardiac ganglia, as represented by the sinoauricular node in mammals. The major accelerator nerve is made up of twigs from the stellate and the three dorsal ganglia. The minor accelerator nerve or nerves are those branches represented as arising from each of the three cervical ganglia, from which they go to the heart, where they pass through the deep cardiac plexus.

The vagus nerve arises by a number of roots from its centers in the medulla. The cardiac branches are usually two cervical, a superior and an inferior, and two thoracic, one from the recurrent laryngeal and the other from the main trunk of the vagus in the thorax. These pass through the cardiac plexuses to their communication with the nerve cells of the sinoauricular, and auriculoventricular nodes, and to the other intrinsic nerve cells of the heart, through which they connect with the muscle cells.

Afferent fibers are undoubtedly to be found accompanying many of the efferent cardiac nerves, although their exact course is not yet settled. It is agreed that the cell bodies of those afferent nerves are to be found in the ganglia of the ninth and tenth cranial and usually the last cervical and first four thoracic spinal nerves. These afferent fibers conduct various kinds of sensation, some of which never ride into consciousness, and others like pain which are readily perceived.

The first afferent pathway to be demonstrated experimentally was the depressor nerve. This is a bundle of fibers associated with the vagus which takes a different course in different species and which even varies from individual to individual. In the rabbit, in which its formation closely resembles that found in man, the depressor nerve arises from two branches, one from the superior laryngeal nerve and the other from the vagus. It is distributed

to the proximal part of the aorta, where its sensory nerve endings are found. Stimulation of the peripheral end of this nerve has no effect; stimulation of the central end causes a fall of blood pressure and reflex (vagus) slowing of the heart. It is claimed that distention of the first part of the aorta will cause a drop in blood pressure through the action of this nerve. The first experimental study of the afferent cardiac nerves in man was through an operation performed by Jonnesco in 1916, for the relief of pain in a case of angina pectoris.

Kelly discusses the mechanism of referred pain in a rather clear manner. The heart muscle is not supplied with pain fibers and to have pain produced by the heart it becomes necessary to call into the equation the mechanism of referred pain production which was worked out chiefly by Henry Head. He showed that the viscera do not possess tactile and pain sensibility, but are supplied by the vegetative nervous system with fibers which enter dorsal spinal roots belonging to definite cord segments. Within the cord these fibers are related to fibers, both motor and sensory, which go to the periphery and carry impulses regulating muscle tone, cutaneous sensibility and other less understood functions. These nervous system activities are carried on without any of the stimuli reaching the consciousness.

However, when inflammation or disease of a viscus occurs the number and intensity of afferent stimuli from the organ to its cord segment increases and the peripheral motor and sensory elements in the segments which are in relation with the sympathetic supply to the diseased organ are so stimulated that muscular rigidity in skeletal muscles occurs and pain is felt in the corresponding peripheral skeletal areas supplied by their cord segments, often accompanied by hyperalgesia of the skin. The pain and hyperalgesia are always distributed according to segmental supply and not according to the distribution of peripheral sensory nerves. This is similar to the distribution of the eruption in herpes zoster.

Mackenzie, with this work as a basis, found that the areas over which pain is felt and over which hyperalgesia occurs following heart pain, correspond to the segmental skin areas supplied from the first, second, third, or fourth dorsal segments of the cord. More rarely the pain may be felt higher in the neck or lower in the epigastric region, showing spilling over of

stimuli into adjacent cord segments, the heart being supplied by sympathetic fibers arising from the first, second, third, and fourth dorsal segments also. Thus the distribution of pain in angina pectoris is that of referred pain. The motor effects are not so clear to observation, but Mackenzie feels that the sense of constriction complained of by many patients is due to spasm of the intercostal muscles.

Diagnosis: Lidwill remarks that it is often very difficult to diagnose the cause or estimate the clinical significance of pain over the precordium. Diagnosis is comparatively easy in cases complaining of a definite pain over the heart following exertion, but there are numerous cases in which a relation between pain and exertion is difficult to ascertain. The typical angina pectoris pain over the heart, extending to the left shoulder and down the left arm, with a feeling of impending dissolution, is quite easy to diagnose.

Many patients complain of a slight, constant pain over the precordium which may or may not be related to exertion. In such cases diagnosis is difficult and it is the duty of the physician to use every possible means to ascertainwhether or not it is of cardiac origin.

Lidwill mentions three types of cardiac pain:
a. Mild discomfort. b. More or less constant ache. c. Anginal seizures, varying in severity. These he divides into: 1. Angina following directly on exertion or emotion. 2. Angina where there is considerable delay between the onset of the pain and the exertion or emotion.
3. Angina where no relation between exertion and pain can be elicited.

When consulted by a patient complaining of precordial pain, very careful note should be made as to the type of pain and its distribution, also, its relation to effort, emotion and exposure to cold. It is extremely important to know just when and how the pain first started. Inquiries should be made concerning a past history of rheumatism, chorea or syphilis.

In conducting the physical examination the patient should be thought of from an anatomical view point, considering all the structures, one by one, that may give rise to the pain, from without inwards. One should have in mind the nerve distribution of the spinal segments corresponding to the internal organs.

In examining the skin one should see if there is any hyperaesthesia; this may be easily determined by stroking the corresponding areas

on both sides of the chest, with a strip of paper three or four inches long and comparing the sensation. It should be remembered that pain and hyperaesthesia may arise in heart disease in the areas supplied by the lower branch of the fifth cranial, the second and third cervical, and the eighth cervical to the fourth thoracic nerves. That is, the jaw, neck, chest, or inner side of the left arm may be affected.

One must not forget that there may be pain before an herpetic eruption appears, and that the pain may continue for many months after the rash had disappeared. With regard to the nerves, determine whether there is any tenderness where the nerves emerge from the muscle.

When examining the muscles for general tenderness do not advise the patient as to what is being done, because the neurotic will often say that there is tenderness when it is suggested to him. If tenderness is elicited independently of suggestion, it will largely corroborate the patient's statement of pain. On further examination see if fibrositic nodules can be excluded. The bones should be examined for swelling, the precordium for friction.

In considering the pleura, it should be noted whether the pain has any relation to respiratory movement. New growths in the mediastinum may be determined by percussion, pressure symptoms or x-ray examinations. Pain arising from the cardiac portion of stomach is of a gripping, burning character located behind the sternum and is generally relieved by a large dose of bicarbonate of soda.

Diseases of the vertebrae, causing pressure on nerves and pain situated at some distance from the seat of trouble, can usually be cleared up by examination of the spine for tenderness or immobility and by x-ray examination.

Certain constitutional diseases, such as syphilis with subsequent tabes, may give rise to discomfort and tightness around the chest.

Toxemias such as tobacco may give rise to precordial discomfort or even acute pain. Disease of the breast can be eliminated by examination. Neurosis can be eliminated only by most careful examination. A careful check must be made for diseases of the aorta.

The most notable characteristic of pain due to cardiac disease is that it is brought about in many cases by exertion. It is quite often difficult to determine the relationship between the exertion and the pain. It must be remembered that the pain may not arise until a good many

hours after the exertion, and it may follow only after a summation of efforts. Vaquez points out that if pain is produced by exercise taken after a large meal, the condition is in all probability due to cardiac trouble. The cases of constant dull ache over the precordium present many more difficulties in diagnosis than the effort type pains.

A previous history of rheumatism or syphilis is greatly in favor of the case being one of cardiac trouble. The presence of arteriosclerosis or a high blood pressure points in the same direction. Pulsus alternans must not be overlooked, if present.

Electrocardiography: Cases occur in which careful questioning and examination leave a doubt as to the cause of the pain, and whether or not there is cardiac trouble present. In these cases electrocardiographical examination is often of enormous value. Lidwill points out that in those cases where there is true cardiac pain, even though the heart is quite normal in size and free from murmers, at least seventy per cent of the patients will give abnormal electrocardiograms, showing that some of them are suffering from coronary narrowing and others from block of the bundle of its branches, et cetera. Also that those patients who have cardiac enlargement and symptoms of circulatory insufficiency and who are really suffering from a diffuse myocardial degeneration, from arterial narrowing, or from multiple foci of low grade infection within the muscle, give abnormal cardiograms in about eighty-five per cent of the cases.

Hypertrophy of the auricles and comparative enlargement of the right or left ventricle can also be demonstrated by the electrocardiograph. It will verify the presence of a mitral stenosis and determine the presence of heart block long before it is suspected. Beside picturing the irregularities, it will show up lesions of the bundle of His which cannot be determined by any other method.

Kahn shows that electrocardiograms are of relative unimportance in the clinical diagnosis of angina pectoris. He says, "In cases of clinical angina pectoris and abnormality of the electrocardiogram, however trivial, may be significant. The alteration in form of the "T" wave following a minor attack is a gradual one, except where there is massive occlusion, so that every alteration is important. In order that the electrocardiogram should serve best in diagnosis

frequent records should be made at intervals".

In his series of three hundred and thirty cases of typical angina pectoris he finds that forty per cent showed negative electrocardiograms during the entire period of observation. He concludes that in the evaluation of the electrocardiogram as an aid in the diagnosis of angina pectoris it must be remembered that negative findings must be dismissed from consideration while even trivial findings may have weighty significance in diagnosis.

Cooksey and Freund, in a serial study of twenty-four cases of acute coronary occlusion find positive electrocardiographic evidence in every case. The changes of diagnostic significance which they found are as follows:

- 1. Deviation of the RT or ST interval, this occurring in eleven of sixteen cases.
- 2. Development of the cove-shaped negative T-wave, first described by Pardee which occurred in twelve of sixteen cases.
- 3. Marked fall in amplitude of the QRS complex in a short space of time which occurred in seven of sixteen cases.
- 4. Flattening out of the T-wave in a brief period of time, this occurring occasionally preceding the development of the cove-shaped negative T. When a marked progressive fall in amplitude of the QRS complex is seen, a poor prognosis is strongly suggested. Four of their cases revealed such an attack, and only one has survived the attack.

Sigler, in his study of twenty cases of acute coronary occlusion concludes that the outstanding features of the electrocardiogram are the frequent changes in the configuration and level of the RT and ST segments, and the configuration of the T-wave. Less frequent, but equally important, are variations in the height, conduction time and configuration of the QRS complex; changes in auriculo-ventricular and interventricular conduction, and in the direction of the electrical axis, at various times in the course of the disease. He feels that emphasis is to be laid on changes in the components of the electrocardiogram, rather than on any single finding no matter how significant it may be.

Differential Diagnosis: First among the cardiac causes of precordial pain seems to be angina pectoris. Attacks occur most often after the age of forty. These are usually precipitated by some sort of mental or physical exertion. Fright, violent anger, great excitement, effort,

or exposure to cold, frequently precipitate attacks. The attack is characterized by excruciating, burning, vice-like, crushing, squeezing, tearing, strangling, constricting, choking or oppressing sensation, or a violent substernal pain radiating to the left shoulder, arm, forearm, and fingers. The radiation may involve the right upper extremity instead of the left, or both. Or the pain may be reflected into the neck, lower jaw, or a widely distributed area. It is accompanied by a sense of fear or apprehension, out of proportion to the calm judgment of the patient in his uninvolved moments. Partial or complete relief is afforded by rest and nitrites, There may be more or less shock associated with the attack.

In coronary thrombosis the symptoms may come on suddenly with or without preceding exertion. In individuals past forty years of age, with previous hypertension, coronary thrombosis is likely to occur. Pain may last for hours or days, and the radiation is similar to that of angina pectoris except for a tendency to involve the epigastrium. Nitrites do not relieve the pain, and it is rarely entirely controlled by large doses of morphine. It is associated with collapse, rapid and often irregular heart action, cold, clammy perspiration, and an ashen gray skin. Dyspnea is usually evident, and cyanosis is present particularly if the infarction is on the right side of the heart. Usually the blood pressure drops suddenly and may at times be as low as forty m.m. The heart sounds become faint and muffled and a pericardial friction rub may appear several hours afterwards. Slight fever and leukocytosis following within about thirty-six hours. Significant changes may be seen in the electrocardiogram in perhaps eightyfive per cent of the cases. It is in the infarcted cases that the pain is much more likely to be in the epigastrium, thus simulating intraabdominal diseases. It is here that the best judgment should be used in avoiding confusion of the diagnosis with that of acute pancreatitis, ruptured duodenal or gastric ulcer, or an acute gall bladder condition.

Pain due to myocardial weakness, a type of fatigue pain, is a very common type of precordial pain. According to Wells, the myocardium may be so damaged as to give plain evidence of interference in function, or the damage may be so obscure as to be difficult to demonstrate. The size of the heart, its shape, rate and rhythm often give valuable aid in

diagnosis. If the pain radiates it is likely to extend around the chest into the back. Compression of the esophagus by the dilated left auricle can frequently be demonstrated by x-ray, and this is often the first positive indication of myocardial disease. The correct recording and interpretation of blood pressure, the exercise test which will always aggravate the pain, and in certain cases the electrocardiogram, are all useful in detecting this condition.

There is the type of fatigue pain which is associated with hypertension and sclerosis of the coronary arteries. These cases often experience an angina-like pain following exertion, which is apt to be precordial and of rather long duration. It does not radiate to the arms, or disappear upon administering nitrites.

The pain associated with paroxysmal tachycardia, flutter or ectopic auricular tachycardia should be easily differentiated by the appearance of palpitation usually marked, by the long duration of the paroxysms, and in arrhythmias by the very irregular or rapid pulse at the time of the attack.

The pain of aortitis and aneurysm should be easily differentiated. This pain is generally substernal, often to the right upper sternum especially if the ascending aorta is involved, as is usually the case in late syphilis, but is more of a prolonged ache. There may be pain referred to the back.

The pain of a pericarditis should offer no great difficulty in diagnosis, because of its sharpness, its duration, and the presence of a precordial friction rub with evidence of infection.

The nervous heart pain, or cardiac neurosis is common among young individuals, if in elderly subjects the symptoms will usually be found to have begun before the age of thirty. The pain is often apical, short, and sticking, occasionally associated with a slight tachycardia, it is more of a precordial hyperaesthesia. An emotional upset is a common cause of the pain. In general the pain is more marked during rest than during activity. The pain often appears at night after going to bed but before going to sleep. The subject is usually of the neurotic type, rather spare of build. Besides the cardiac symptoms there are usually complaints referable to several other parts of the body, especially the gastro-intestinal tract. The patient always complains of nervousness and associated symptoms. The victim of cardiac

neurosis often thrashes about in bed. Often they cry out continually, "I am dying", usually taking care that some one hears them. The facial expressions change from moment to moment. Sodium bromide may give considerable relief to the patient. Nitrites do not help them, often nitroglycerine makes them worse.

Precordial pain of nerve root origin, which is commonly associated with hypertrophic ostearthritis of the spine, occurs so frequently that it is worthy of attention here. Gunther and Sampson contend that it is distinguished by its close relation to motion of the spine, such as occurs in bending, raising the head on awakening, getting out of bed, walking, sitting in one place any length of time, and lifting. Conversely, relief is obtained by use of mechanical appliances, such as corsets and braces, and of a non-resistant surface for sleeping. The precordial pain of nerve root origin is delineated in broad beltlike zones along well defined spinal root dermatones. It is constantly present in the back of the chest as well as over the precordium. Associated sensory changes can be demonstrated which are bilateral and distributed according to spinal root zones both in front and in back, and corresponds usually to the entire distribution of the roots in the area of subjective sensory disturbances. This type of pain does not respond to nitrites. X-ray examination of the spine reveals the presence of hypertrophic ostearthritis in one or both of the vertebrae forming the foramina of exit of the involved dorsal root.

Other types of precordial pain which at times must be differentiated from true heart pain are according to Clark, pleurisy, pulmonary disease, intercostal neuralgia, neuritis, myalgia, muscle strain, bursitis, rib or arm injury, mediastinal diseases, tumors and diseases involving posterior roots of spinal nerves, locomotor crisis, and organic disease of the esophagus. These conditions do not seem to be often confusing, or so difficult to differentiate.

SUMMARY

1. Cardiac pain may be classified clinically as: A. Hypertensive, B. arteriosclerotic, C. syphilitic, D. rheumatic, E. thyroid, F. coronary pathology, G. angina pectoris, H. obesity, I. effort syndrome. It seems to me, however, that the following classification is more definite and desirable: A. Simple fatigue pain (this covering chronic hypertension, aortic stenosis

(Continued on Page 29)

PRESIDENT'S PAGE

To All Members of The Kansas Medical Society:

A thought occurs to us that every county medical society would find it profitable to hold a special meeting some time during January for organization purposes.

Seemingly it could at such a meeting:

- 1. Discuss plans in detail for the ensuing year, outline the type of scientific presentations its members would like to have and arrange to hold at least eleven other meetings during the year.
- 2. Appoint committees which will agree to work diligently toward the solution of medical indigent and other local problems and toward furtherance of public health and public information programs.
- 3. Review its legislative activities to date and make plans to hold itself in readiness for handling of the very important assistance which it will be called upon to provide during the next several months.
- 4. Appoint and keep active, a liason committee (if it has not already done so) which will be available at a moments notice to discuss with Social Security Act and other representatives any medical programs contemplated in that county.
- 5. Institute its own membership campaign with a goal in view of securing and holding membership of every eligible physician in that area.
- 6. Adopt any other programs and activities which will tend to make organized medicine in that county an efficient and workable agency.

Medicine, although it has made great progress during the past few years in the handling of its economic problems, still has many problems to solve. It will also pass through many crises during the next few years. Undoubtedly it behooves all of us to spend additional time and effort toward making particularly efficient our only hope for solution of these matters—the county medical society.

H. L. Snyder, M.D., President.

EDITORIAL

A NEW HONOR

Kansas medicine as well as our esteemed President is honored by the appointment of Howard L. Snyder, as a member of the Board of Regents by Governor Alfred M. Landon. Our educational institutions have many medical problems in connection with student health and our expanding medical school at the state university will benefit greatly by this addition to the board. It is to be hoped that a similar appointment will be made by any future governor when a vacancy occurs in the position now so capably filled by Doctor Snyder.

HOW TO GET A BASIC SCIENCE LAW

The Kansas Medical Society continues its unrelenting efforts toward the passage of a basic science law. A pamphlet has just been published by the Society entitled "WHY DOES KANSAS NEED A BASIC SCIENCE LAW?" A copy has been sent to each member and a supply of the pamphlets to be widely distributed among the population is in the hands of every county society secretary.

This pamphlet sets forth briefly and concisely what the basic sciences are, what constitutes basic science laws, together with the discussion of the valid and invalid objections to such laws, and why Kansas needs a basic science law. The Committee on Public Policy is to be congratulated upon its work in the preparation of the pamphlet. A great deal of study and careful consideration of the subject has been condensed into a form to be quickly read and there is displayed a fine sense of fairness in its presentation.

Every Kansas doctor should read "WHY DOES KANSAS NEED A BASIC SCIENCS LAW?" This pamphlet is not to be cast into the wastebasket nor allowed to be submerged among accumulated papers on the physician's desk. It is to be read, then given to patients

and influential friends to read. It is of the utmost importance that the information contained in the pamphlet be disseminated as widely as possible, among not only physicians, but the general public as well. Kansas physicians must become thoroughly informed as to this activity of their Society in order to use their influence to the fullest extent for the passage of the Basic Science law. The interest of the public must be aroused and widespread understanding of and sympathy for the measure created.

Kansas was the first state in the Union to propose such legislation when, in 1911, Governor W. R. Stubbs appointed Dr. J. A. Milligan and F. Dumont Smith as a commission to work out a method of state control for the practitioners of the various cults. At that time, Kansas had a license act for only the regular medical profession. The bill prepared by Doctor Milligan and F. Dumont Smith was a model for a Basic Science Law, but the legislature, failing to comprehend the importance of such a measure, did not pass it. Since that time, The Kansas Medical Society has never ceased in the effort to secure the passage by the legislature of a Basic Science Law. Nine other states have gone forward to the enactment of such legislation and the experience of these states in the results obtained is most gratifying to the proponents of basic science legislation.

Kansas will have a Basic Science Law as soon as the public is educated to the need of it. The obstruction of interested pressure groups to the progress of science, the misconception of "liberty", and the failure of men of public affairs to recognize the importance of legislation pertaining to the health of the population are responsible for the delay in giving to the citizens of Kansas the protection of a Basic Science Law. The medical profession has long ago acknowledged its responsibility. It remains for each physician to assume a personal responsibility in the campaign to publicize the measure and to use his influence to secure its passage by the legislature.

MEDICAL CARE OF INDIGENTS

The scientific interest of physicians is the inspiration and force in the building of medical organizations. Meeting together for the discussion of common problems fellowship has been established resulting in unified effort for the good of the profession and for the public which it serves. Economic questions have not been introduced into medical councils until of late. The amount of free medical service which has been required of physicians, being greatly increased, has thrown an economic burden upon the medical profession. Many of its members have felt financial impoverishment. There has been a great deal of discussion and experimentation in search for a solution of the problem. In Kansas some county medical societies have entered into an agreement with county officials whereby medical services to the indigent are paid for out of tax funds. In some instances this has proven satisfactory, and in others it has broken down because the demands of the doctors have exceeded the amount which county authorities are willing to pay. This has given rise to a condition wherein the physicians of some communities are refusing to attend the sick because county officials are unable to meet their financial requirements. In instances where physicians are refusing to serve the sick because of lack of financial remuneration they are acting out of character with the medical profession. The medical man is a constant type, in character dependable, and it is credited to him by society that he has the power to keep his selected motive of service dominant. In times of stress he is tested for his fidelity. It is only at such times that the problem of furnishing medical services to those who can not afford to pay for it can be brought forcibly to those in political authority. But the appeal to political authority must come through officials of organized medicine, exerted in behalf of those members of the profession who are unjustly made to suffer. A revolt here and there can accomplish nothing. We should continue to fulfill our mission in serving the sick while officials of our organization exert their efforts to bring about the adjustment of local difficulties.

LABORATORY

Edited by J. L. Lattimore, M.D.

TULAREMIA

J. L. LATTIMORE, M.D.

Topeka, Kansas

Tularemia, better known in this portion of the country under the name of rabbit fever has appeared in many portions of Kansas this fall and likely, before the rabbit hunting season has passed, will occur many times.

The disease usually moves in cycles and it was hardly expected that Kansas would have many cases this year. Only three years ago, several hundred cases were reported in Kansas, then for two years there were relatively few.

The disease is due to the bacterium tularense, a very small, non-motile, Gram's negative bacillus. It is so small that often it presents a coccoid form. It does not stain with the ordinary dyes, even carbol fuschin may be ineffective. Only fair staining results have been obtained when using gentian violet or victorian blue dissolved in anilin.

The growth of the bacterium on artificial media is also a very complicated problem. McCoy and Chapin use a coagulated egg yolk medium. Francis uses blood or serum agar, enriched with pieces of sterile fresh rabbit liver while Foshay uses a complicated media containing brain-veal agar to which he adds nutrose, sodium chloride, sodium hypophosphate, potassium chlorate and calcium carbonate. Foshay reports that the bacterium grows very rapidly and luxuriantly but his medium is not satisfactory for preservation of the colonies.

The diagnosis is made by agglutination of emulsion of the bacterium tularense by the serum from the patient. In previous epidemics, the agglutinins reach titratable amounts within about ten days. In most of the cases reported this fall, the agglutinins appear rather late, usually about two to three weeks after infection. Due to the trouble in growing these organisms, usually an antigen prepared by one of the commercial houses is used.

Clinically, we recognize two distinct types of tularemia, 1. the glandular, and 2. the typhoidal. The more common form encountered in Kansas has been the glandular form, usually giving a history of rabbit handling, a lesion on the hand and very large, painful axillary glands. The typhoidal type is often undiagnosed, as the temperature general findings resemble typhoid fever, but does not give the tongue and intestinal symptoms.

The axillary glands usually reach a suppurative stage within in about 2 to 3 weeks and should be opened when the findings justify it.

In recent years, a serum, developed by Dr. Lee Foshay of Cincinnati, has been accepted as the best form of treatment. The serum is made from the goat and contains acceptable amount of antibodies. The serum is now available on the commercial market. The writer has used this serum in only four cases, but in these limited number of cases, the course of the desease has been of shorter duration than the average case, which is from two to three months.

The disease is not contagious from man to man. In a previously published article by the writer, cases were reported from a tick bite, handling of a snake that had eaten an infected rabbit, a case where the primary lesion was from a wound on the toe, and several other cases of rare origin.

Kansas physicians should keep in mind the prevalence of this disease during the current winter months and remember it is a reportable disease to the public health department.

If we are to make cheapness the hall-mark of medicine, then would we return our people to the dark ages when life itself was cheap, for no less than life itself is involved in medical service. As you so well know, the common cold within hours can be pneumonia; the common fracture can result in a disability for life reducing earnings by a half; diabetes can be liver with or, improperly treated, a cause of too early death; improper diagnosis can mean a life from cancer or prolonged periods of invalidism from any of many causes. When you abandon present standards for fixed sum payments, you enter upon a principle in the operation of which the physician profits most from performing the minimum service,-a practice wherein the man who pays hard-earned money for months and years may find the institution that took his payments non-existent when he calls upon it in his time of need .- J. G. Crownhart in the Milwaukee Medical Times.

TUBERCULOSIS ABSTRACTS

A review for physicians prepared monthly by the National Tuberculosis Association and published through the co-operation of the Kansas Tuberculosis and Health Association and The Kansas Medical Society.

TREAT THE WHOLE MAN*

The prevention of relapse among arrested cases of tuberculosis is a chief concern of those engaged in tuberculosis work. Various schemes such as sheltered workshops, convalescent homes and camps have been set up from time to time but they reach only about one out of every seventy-five patients who need such service. It is essential that some practical program be worked out that can be applied on a much wider scale.

In an effort to escape from theory and opinion and to build a program based on the actual needs of patients, a factual study was made of 5,000 patients over sixteen years of age in forty sanatoria in fifteen states. The results show that the majority of sanatorium patients are young; with limited schooling; with occupational experience largely in the semi-skilled or unskilled group; in need of vocational guidance; with definite desires for further study and training. In the light of these findings it was decided to stop using the term "after-care" since by waiting until after the patient has been discharged from the sanatorium, opportunity for guidance and training is lessened and sometimes lost. "Social and vocational rehabilitation" more accurately describes the ultimate goal, which is "to return each patient to that place in society where he can obtain the greatest amount of happiness for himself, at the same time that he is giving his best to the common life around him".

Guidance involves a knowledge of the individual to be guided and a knowledge of the community in which he is to live. Proficiency in a certain type of work and enjoyment of that work usually go together. It is important to find each patient's strong points and to give him all the training he can take in line with his best abilities. Vocational adjustment, important for everyone may be a deciding factor between illness and health in the case of the tuberculosis patient.

*Rehabilitation of Sanatorium Patients in the U. S. A., Beulah W. Burhoe, Ph.D., Bull. De L'Union Internationale Contre La Tuberculose, Vol. XIII, No. 1, Jan., 1936. While aptitude tests are of great help in counseling much can be accomplished without them. Careful study of school life, in terms of subjects liked and disliked; of occupational experience in terms of satisfaction or dissatisfaction; of leisure time including favorite sports and amusements, preferred magazines and newspapers, will throw a great deal of light on the patient's abilities. It is equally important to get at the patient's tastes, and his hopes and ambitions for the future. Knowledge of work opportunities in the community is of course essential to the giving of sound vocational advice.

The methods outlined above are called "social and vocational diagnosis". Just as medical treatment is undertaken only after a complete medical diagnosis has been made, so social plans should be made only on the basis of a diagnosis of his social and vocational needs.

Complete physical rest cannot be obtained without peace of mind. Planning for the future often lays most of the patient's persistent worries, thus facilitating the medical cure. Planned study is proving its therapeutic value in many sanatoria. Teachers are furnished by the sanatorium, through WPA funds, depending on the resources of the community. Instruction is brought to the bedside by tutors and through radio. Some sanatoria have their own broadcasting system so that patients in the different wards throughout the hospital can be included in classes. Regular grade school work, high school and college subjects and a number of vocational courses are being taught.

After discharge the study begun at the sanatorium is carried on through outside agencies notably through the State Rehabilitation Bureaus which exist in forty-four states. These bureaus have public Federal and state funds for the retraining of people who because of accident or illness should not return to their old occupations.

But the best guidance and training is barren unless it results in actual placement on a job. The widening Public Employment Service is deeply interested in fitting people who have recovered from tuberculosis into suitable employment. The recovered patient is not treated as a handicapped individual. His assets not his liabilities are stressed. In days of vast unemployment it is more than ever essential that the recovered patient be trained along the line of his greater capacity.

Patients are often told to return to their old occupations, but for a very large number of them this is not possible. A recent study of more than 300 patients revealed that two-thirds of them must be trained for new occupations. There is no simple formula for this solving of the problem of rehabilitating the tuberculous. The problem is social as well as medical. Medical diagnosis and social diagnosis, treatment and training, recovery and placement in a suitable occupation are essential elements in the solution of the problem of rehabilitation and the prevention of relapse.

MEDICAL ECONOMICS

Edited by O. W. Davidson, M.D. of the Medical Economics Committee

TIMELY BREVITIES

We are almost sizzling as we write this. Indignation guides our pen. If the paper doesn't catch fire or we don't "pop an artery", you will soon learn the reason for our wrath.

Last evening we made a professional call. Our patient was the employee of a national "chain" concern. During the course of our visit we learned that the weekly salary of this man is \$14.00 per week. For this amount he works as many as ninety hours a week. Now, if you will do a bit of mental arithmetic you will find that his hourly stipend is exactly fifteen and one-half cents.

This man, no doubt, is one of the individuals to whom the propagandist foundations say illness is catastrophic. Well, we agree with them. But—on a salary such as his—so is the purchase of a new suit, or the payment of rent! Either of these will wreck a \$14.00 per week pay check. And yet no one is advocating free clothes and free rent for him. It seems that medicine alone is to be the "goat".

In a case such as this urging anything short of a substantial increase in salary is "putting the cart before the horse". Socialized medicine is an ingenious scheme of relieving penurious employers of their just responsibility to their workers.

Let the medical profession beware lest it be made the "cat's paw"!—A. C. Hanson, M.D., The Bulletin of the Des Moines Academy of Medicine, December, 1936.

INDIGENT CONTRACT

We have reproduced below a contract for direct relief medical attention now in effect in Montgomery County:

"AGREEMENT

THIS AGREEMENT made and entered into by and between the Board of County Commissioners of Montgomery County, Kansas, hereinafter called party of the first part, and the Members of The Montgomery County Medical Society, hereinafter called party of the second part.

- 1. Party of the first part hereby selects and employs party of the second part as an official agency of this county to provide medical attention within limits herein described to certain direct relief clients of this county.
- 3. In exchange therefor, party of the second part, through those of its individual members who elect to participate in this agreement, will furnish ordinary and reasonable medical advice and attention and where possible, ordinary and reasonable emergency surgery to all direct relief clients, or families, who request and are properly entitled to such service.
- 4. It is understood that party of the second part's services, and those of its participating members for the compensation above specified shall not include: Surgery and treatment not within the customary and usual practice of party of the second part's participating members; surgery and treatment for which necessary equipment, facilities or incidentals are not adequately available or provided; laboratory assistance other than that furnished without cost by the State Laboratory; roentgen or radium diagnosis and treatment; hospitalization; appliances; nursing; and dentistry. Medical service rendered participating members by party of the second part for compensation above specified, shall include ordinary medicines other than those furnished by the State Board of Health and other agencies, and such surgical dressings as may be required in the treatment of said participating members for such minor surgical ailments as do not require hospitalization. Particular services determined to be within the above exceptions and desired from party of the second part, shall require separate agreements with additional compensation.
- 5. Payment in advance for a particular direct relief client, or family, and for a month in which attention is requested or necessary for that client, or family, shall be a condition precedent to any obligation on the part of party of the second part or its participating members.
- 6. Party of the second part shall be privileged, for just cause, to decline acceptance within this agreement of any direct relief clients, or families, who he does not desire to attend. Party of the second part may also, for just cause, discontinue attention to particular direct relief

clients. or families, who have been previously approved by extending thirty days notice of such intention to party of the first part, and by refusing acceptance of additional payment on their behalf. Party of the first part may likewise at its option refuse to include particular direct relief clients, or families within this agreement, or it may withdraw particular clients, or families, by failure to certify such clients on any list as entitled to such service.

- 7. Party of the first part, on the twenty-sixth day of each month shall furnish lists to party of the second part's participating members which shall show the names of all direct relief clients, or families, who are entitled to receive attention during that month, shall furnish each relief client, or participating member, a pass-card showing member's name and number of dependents, which card shall be signed by the client, and shall be presented to party of the second part on each occasion when said client, or his dependents, shall apply for treatment by party of the second part. Party of the second part shall furnish a list and subsequent corrections to party of the first part showing the names of its members who have elected to participate in this agreement.
- 8. Willingness of a majority of party of the second part's individual members to accept a substantial number of patients under this agreement shall constitute compliance by party of the second part with the extent of service contemplated.
- 9. Although party of the second part shall cooperate in attempting to provide adequate attention for all direct relief clients within the provisions of this agreement, and in attempting to make available a free choice of its members, it reserves the following rights for any or all of its individual members: To accept, refuse, or discontinue attention to particular direct relief clients, or families, included herein, in the same manner as in their usual practice; to require examination and treatment of ambulatory patients at designated places and hours; to have reasonable periods of time for appearance at necessary home calls; and to pursue other restrictions reasonably in accord with the conduct of their other practice.
- 10. It is understood that only bona fide direct relief clients may be included for attention under this agreement, and that no client, or family, except as may occur in good faith, shall be temporarily included for benefit of a particular intended service.
- 11. Party of the second part, through its secretary, shall be entitled to actual notice of any or all instances wherein alleged negligent service, alleged neglected service, or other alleged breach of this agreement are claimed by party of the first part or by particular direct relief clients. Such actual notice shall be given by party of the first part, or by complainant direct relief clients, within a reasonable time after a difficulty is perceived, and shall be recognized as a condition precedent to any rights extended hereby.
- 12. Party of the second part will cooperate in maintaining on a minimum basis of cost commensurate with reasonable and necessary care all hospital services and other additional and exceptional expense, which are supplied at the expense of party of the first part.
- 13. Party of the first part will cooperate with party of the second part in controlling malingering and other unnecessary demands for attention.
- 14. Party of the second part believes that functions of the County Health Officer can be furthered generally

and for the good of services to be extended by this agreement with assistance and cooperation from party of the second part. To make this possible, party of the second part shall be privileged to nominate from its members at any time a vacancy may occur, a candidate for the office of County Health Officer. Such nomination shall then be presented for the consideration of party of the first part, and if the nominee is thereby elected, he shall be compensated by party of the first part, and shall proceed with the affairs of that office with all assistance possible from party of the second part. In the event such nominee is not acceptable to party of the first part, then additional nominations shall be made in an effort to find a member mutually agreeable. However, it is understood that this provision shall in no way restrict a final choice by party of the first part.

15. This agreement shall be known as The Montgomery County Medical Society Plan. A certified copy shall be kept on file at the office of the County Poor Commissioner, and made available by party of the first part for inspection at any time by direct relief clients.

16. It is hereby further agreed that should party of the first part desire to secure the services of parties of the second part to perform certain emergency surgical operations on other persons than those on direct relief, such persons being classified as indigent, parties of the second part agree to perform such emergency surgical operations for fifty per cent of the regular fee for such operation, charges to be based upon fee list adopted by The Montgomery County Medical Society at its called meeting on September 27, 1935, a copy of such fee list being hereby attached. Said emergency operations to be performed only when authorized by party of the first part.

Compensation thereunder is received by a board consisting of three members of Montgomery County Medical Society and the County Poor Commissioner. Each member of the society renders services to direct relief clients on a free choice basis and forwards a monthly statement to the board showing the names of patients treated, the diagnoses, the dates on which service was given, the types of service, the total value of service as established by a county medical society fee schedule, and detailed information concerning medicines, dressings and other incidentals. On approximately the fifth day of each month the board reviews all statements received and authorizes payment on the following basis:

"All bills for medicines and dressings are paid on a basis of eighty per cent of amount of bill submitted. All bills for service are paid on a basis of fifty per cent of amount of bill submitted. Should the funds available any date of payment, be insufficient to pay bills up to fifty per cent, all funds on hand will be prorated toward such payment. Any surplus after allowing all bills, will be carried forward to the succeeding month to be used in payment of bills. Any surplus on hands when this plan ceases to exist will be prorated among participating physicians on basis of amount of service rendered".

It will be noted that this plan would be workable also on a "lump sum" basis wherein the county medical society would agree to treat indigent patients for an established annual, semi-annual or monthly amount.

DUES

Doctors who think their medical society dues are high are told by the New York Medical Week to cast a glance at the dues of \$20 in the County Lawyers Association, of \$75 in the Bar Association, of \$30 in the Plumbers Union (with \$200 initiation fee), and of \$64 in the Electrical Workers (with \$100 initiation). Instead of being high, "the county society dues are low—too low, in fact, to sustain the ever-expanding duties which organized medicine must assume . ." Many spheres of influence are closed to the profession because its official organizations have not the funds for active participation in important movements.

—New York State Journal of Medicine.

MEDICAL LITERATURE

Edited by Will C. Menninger, M.D.

CORRECTION OF FAULTY POSTURE

Laplace and Nicholson studied eighteen healthy subjects, male and female, with postural defects of the kypholordotic type with respect to the immediate physiologic change produced by correction of posture. The following studies were carried out with the subject standing first in the corrected, then in the faulty posture: (1) orthodiagrams with special attention to the thoracic and cardiac measurements and the maximum diaphragmatic excursion; (2) estimations of vital capacity obtained with a standard spirometer; (3) electrocardiograms; (4) estimations of oxygen consumption and graphic records of the respiration including measurements of tidal air and minute volume, obtained with a standard

spirometer for metabolism determinations; and (5) repeated determination of blood pressure and pulse rate over ten-minute intervals with preceding and intervening ten-minute intervals during which the subject was recumbent. On the basis of these readings a rating for circulatory efficiency in each of the two postures was obtained according to the method of Turner. Corrected posture did not always produce an elevation of the diaphragm with respect to the top of the chest nor did the heart always become more transversely placed. The vital capacity was increased by assuming a corrected posture but it was noted that flexibility of posture was essential in obtaining optimum results. The respirations in the corrected posture became slower and deeper and the respiratory minute volume was increased. The oxygen consumption was not altered in a consistent manner, but the evidence suggested that under normal conditions it is lower in the corrected than in the faulty posture. In the majority of subjects, blood pressure and pulserate changes on standing indicated a better degree of circulatory efficiency in the corrected posture. In two cases, the corrected posture was able to prevent a postural hypostatic congestion. The authors conclude that the correction of postural defects has a significantly beneficial effect on circulatory and respiratory functions in the majority of cases, but that its value varies considerably in various individuals for reasons which are not always evident. In some cases, its effect may be spectacular, and occasionally full correction may be a physiologic handicap. For each individual there is an optimum posture, the attainment of which produces the maximum therapeutic benefit.

Laplace, L. B. and Nicholson, J. T. Observations on Some of the Physiologic Effects of the Correction of Faulty Posture. American Journal of Medical Sciences 192:345-353, September 1936.

HEMATOPORPHYRIN THERAPY

This is a further report of a study of synthetic hematoporphyrin hydrochloride as a therapeutic agent in the psychoses which was begun by the authors in 1933. The entire series includes sixty-one psychotic patients, of which six were schizophrenic. Of these, one showed general physical improvement and five remained unchanged. In fifty-five cases of affective reactions, 36.4 per cent showed marked sustained improvement, 18.2 per cent moderate clinical improvement, but no change in the

course of the psychosis, while 27.2 per cent were not benefited. The drug was administered both orally and intramuscularly. When injected into experimental white rats and frogs, it produced photosensitization and motor activation with evidence of skin irritation. When injected in test doses intradermally in human beings, it produced marked local photosensitization and residual pigmentation after exposure to sunlight. The specific effects of its photosensitizing power seem to be made evident in the sensitization of the skin to sunlight and in at least one case of photophobia. It is suggested that the beneficial physiologic and psychologic actions of the drug are not necessarily due to some poorly understood changes in the vegetative nervous system resulting from skin sensitization, but that they may be due to the improved oxygen uptake of the brain cells which is greatly enhanced in the presence of light and by the increased sensitization of the patient to light.

Strecker, E. A., Palerm, H. D., and Braceland, F. J. Hematoporphyrin Therapy in the Affective Psychoses, American Journal of Psychiatry 93:360-374, September 1936.

EXERCISE IN DIABETES

Five young diabetics in good physical condition were tested by Marble and Smith to determine the effect of exercise upon the sugar content of the blood. Exercise of three types, running, working on rowing machine, and stair climbing was performed in the early morning after fasting from twelve to fourteen hours or after having insulin at 5:30 a.m. The blood sugar curves taken from these different procedures show that exercise of a short duration carried to the point of only mild fatigue causes a definite and often a marked increase in the concentration of sugar in the blood of diabetics who have not received food or insulin for several hours. This shows the need of adequate control of the diabetic condition, since if it is not and the body has not been supplied with an adequate amount of insulin, exercise instead of conferring benefit may actually increase the hyperglycemia and glycosuria. The logical sequence for the diabetic patient on arising is insulin, exercise, and breakfast, rather than exercise, insulin, and breakfast. Since the completion of these studies protamine insulinate has been introduced and the authors point out in a foot-note that this preparation, the effect of which lasts for from twelve to thirty

hours, the level of the blood sugar remains more nearly normal for a greater part of the twenty-four hours and hence exercise should exert a lowering effect on the blood sugar level at practically all times.

Marble, A. and Smith, R. M. Exercise in Diabetes Mellitus, Archives of Internal Medicine 58:577-588, October 1936.

RHEUMATIC INFECTION IN CHILDHOOD

Ash reports the course of rheumatic infection as observed in 445 children seen at the Children's Hospital during the years 1922 to 1932. Ninety-three per cent of these children were observed for an average period of seven and onehalf years after the onset of the infection, at the end of which time sixty-six per cent presented valvular heart disease and twenty-two per cent had died. The worst prognosis was found in those patients who manifested pericarditis, rheumatic pneumonia, involvement of both aortic and mitral values, the early appearance of a button-hole mitral stenosis and subcutaneous nodules obvious on cursory inspection. Chorea in itself was a mild manifestation. In an intermediate group may be placed epistaxis, abdominal pain, hematuria, and the multiform cutaneous eruptions. The course of the disease was modified by such variable factors as sex, racial origin, age at onset of the infection, and the calendar year of the origin. The statistics show that within recent years there has been a lowering in the mortality and in the incidence of cardiac involvement. Altho it is possible that intensive supervision in the clinic for patients with heart disease has been a factor, the author feels that the modification of the disease is probably a natural phenomenon. Since most of the children who showed permanent cardiac damage had already done so by the end of the second year after the onset of the disease, the crucial period for treatment is within the first year after the onset.

Ash, Rachel. Prognosis of Rheumatic Infection in Child-hood, American Journal of the Diseases of Children 52:280-295, August 1936.

To many persons the word laboratory implies a place where test tubes and complicated apparatus are employed to satisfy intellectual curiosity. The clinical investigative laboratory is not of that order, for wards with patients are the salient feature. The sick individual is the center of the picture.—The physician—must be a student of men and never forget the uniqueness of each human being if he is to be intelligent in the care of the sick.—George R. Minot.

CONSTITUTION AND BY-LAWS

(The following represents a continuation from the December Journal of the new Society Constitution and By-Laws adopted by the last House of Delegates.)

Sec. 9. The House of Delegates shall be the final authority in charge of all legislative and business affairs of this Society.

Sec. 10. It shall give diligent attention to and foster the scientific work and spirit of this Society, and it shall constantly attempt to further interest in and improve the quality of the annual sessions.

Sec. 11. It shall consider and advise as to the material interests of the medical profession, and of the public in those important matters wherein it is dependent upon the medical profession, and shall use its influence to secure and enforce all proper medical and public health legislation and to diffuse popular information in relation thereto.

Sec. 12. It may delegate and empower the Council or a special standing committee to employ, advise and supervise an Executive Secretary whose duties shall be as provided in these By-Laws.

Sec. 13. It shall receive the recommendations of the Council, or the duly appointed finance committee of the Council, concerning an annual budget prepared by the Executive Secretary, and after giving due consideration to the recommendations of the Council, or its finance committee, shall make annual appropriations for the expenditures of this Society. It may amend current appropriations at either an annual or special meeting. No expense may be incurred on behalf of this Society in excess of or outside of these appropriations except under the emergency authority specified in these By-Laws.

Sec. 14. It may at any regular meeting, by a two-thirds majority of the delegates present, transfer all or any part of the money accumulated in any fund to any other fund, or redistribute any unexpended money previously allocated to various funds or purposes.

Sec. 15. It shall have authority to appoint committees for special purposes which may be composed of members of this Society who are not members of the House of Delegates. Such committees shall report to the House of Delegates, and may be present and participate in the debates on their reports.

Sec. 16. It shall elect representatives to the House of Delegates of the American Medical Association in accordance with the Constitution and By-Laws of that body: Provided, that the incoming President shall be elected each year as a delegate.

Sec. 17. A summary of the proceedings of the House of Delegates shall be published immediately following each annual session in one or more issues of THE JOURNAL OF THE KANSAS MEDICAL SOCIETY.

Chapter VI.—Election of Officers.

Section 1. As provided in these By-Laws, the election of officers shall be held on the morning of the last day of each annual session.

Sec. 2. All elections of officers shall be by secret ballot

unless a single candidate is nominated for an office, whereupon the vote may be taken viva voce. A majority of the votes cast shall be necessary to elect. If on any ballot no nominee shall receive a majority, the name receiving the smallest number of votes shall be dropped, and the balloting shall proceed in that manner until a majority is obtained. Nominations for all offices shall be made from the floor of the House of Delegates.

Sec. 3. Any member known to have solicited votes for himself, or to have otherwise sought any office within the gift of this Society, shall be ineligible for any office for two years.

Chapter VII.—Duties of Officers.

Section 1. The President shall be the real head of the medical profession of this state during his term of office. It shall be his duty to counsel with all officers, Councilors, component societies, committees, members, and other representatives toward the best interests of the public and this Society; to attempt to further the aims and activities of this Society to the fullest extent; and to perform such other services as custom, necessity, and parliamentary usage require. He shall in accordance with these By-Laws appoint all committees, except as is otherwise provided, and in addition to being a member and the presiding officer of the House of Delegates and the Council shall be an ex-officio member of all committees and boards. He shall be extended an opportunity to preside and officiate at all major functions of the annual session, and shall deliver an annual session address at the time arranged by the Committee on Scientific Work. To the extent possible, he shall visit by appointment the various sections of the state during his tenure of office.

Sec. 2. The President-Elect shall attend all meetings of the Council; shall familiarize himself with the personnel and work of the various committees and of this Society in general; shall be ready to counsel with the President on matters affecting the future of this Society; and shall otherwise prepare himself for assuming the leadership of this Society at the proper time. In the event of the death, resignation, or removal of a President-Elect, a successor shall be elected at the following meeting of the House of Delegates to serve during the presidential term for which his predecessor was elected.

Sec. 3. The first Vice President shall assist the President in the performance of his duties; shall preside in his absence at the meetings of this Society, the House of Delegates, or the Council; shall represent the President when requested at regular meetings, committee meetings, or other functions; and in the event of the death, resignation, or removal of the President, shall immediately succeed to that office for the remainder of the term.

Sec. 4. The second Vice President shall also assist the President in the performance of his duties; and in the event of the death, resignation, or removal of the first Vice President, shall succeed to that office for the remainder of the term.

Sec. 5. The Secretary shall advise the Executive Secretary in all secretarial matters of this Society, and shall act as the corporate Secretary insofar as the execution of official documents or institution of official actions are required. He shall perform such other duties as are placed upon him by this Constitution and By-Laws, and in the event of the death, resignation, or removal of the Executive Secretary shall assume the duties of that office until the vacancy is filled.

Sec. 6. The Treasurer shall be the custodian of all monies, securities and valuable papers of this Society; and

shall deposit them in safe banking institutions, or invest them, subject to the direction of the Council. He shall be bonded at the expense of this Society in such amount as the House of Delegates may require. He shall pay all authorized obligations of this Society by vouchers which shall be countersigned by the President, except as is otherwise provided in these By-Laws. He shall keep a detailed account of all receipts and disbursements, and shall make an annual report to the House of Delegates concerning the financial transactions of this Society for the preceding fiscal year, the funds of this Society in his care, and his actions as Treasurer. He shall make such other reports as may be requested by the House of Delegates or the Council, and shall subject his accounts to such examination as the House of Delegates or the Council may at any time order. He shall establish a revolving fund in an amount approved by the Council for routine expenses of the Executive Secretary office, which fund shall be set aside in a separate banking institution and be subject to check by the Executive Secretary with the understanding that disbursements therefrom shall be satisfactorily accounted by the Executive Secretary to the Treasurer before replenishment is made.

Sec. 7. The Executive Secretary shall perform the duties usual to such an office except those specifically imposed by this Constitution and By-Laws upon the officers, Councilors, committees, boards, and other representatives of this Society. Subject to instruction by the House of Delegates, the Council, or the President, he shall act as general administrative officer and business manager of this Society. He shall refer to the proper officials all administrative questions as properly come within their jurisdiction. He shall attend the annual sessions, the meetings of the House of Delegates, the meetings of the Council, as many of the committee meetings as possible, and shall keep separately the minutes of their respective proceedings. He shall undertake secretarial functions for all officers. Councilors, committees and boards of this Society, and shall assist wherever possible in the performance of their duties. He shall issue and send to lay publications such articles and news material as are authorized for publication. He shall secure upon invitation medical speakers to address lay organizations on subjects which are in accord with the aims and ideals of this Society. When requested, he shall assist the component societies in securing speakers and in preparing programs. He shall at all times hold himself in readiness to advise and aid, so far as is possible and practicable, all officers and committees of this Society in the performance of their duties and in furtherance of the purposes, of this Society. He shall be the custodian of the general papers and records of this Society, except as properly belong in the custody of the officials of this Society. He shall account for, and promptly turn over to the Treasurer all funds of this Society which come into his hands. It shall be his duty to receive all bills against this Society, to investigate their fairness and correctness, to prepare vouchers covering the same, and to forward them together with proper support to the Treasurer for payment as provided in these By-Laws. He shall keep an account with the component societies of the amounts of their assessments, collect the same, and promptly turn over the proceeds to the Treasurer. He shall make an annual report of his activities to the House of Delegates, and shall make such other reports as the Council, or its authorized committee, may require. He shall, within thirty days preceding each annual session, submit his financial books and records to a certified public accountant, approved by the Council, whose report

report. He shall, with the advice of all interested officials, prepare and submit annually to the House of Delegates a tentative budget of this Society for the ensuing fiscal year, together with the recommendations of the Council, or its authorized finance committee, thereon. He shall provide for the registration of members and delegates at each annual session. With the co-operation of the secretaries of the component societies, he shall keep a record of all legally licensed doctors of medicine in this state, together with such information as is available about each. He shall transmit to the American Medical Association all copies of records that may be desired by that Association, together with such other information as may be of value. He shall aid the Councilors in organizing and improving the component and district societies, and in the extension of the usefulness and influence of this Society. He shall endeavor to visit component societies when his duties will permit, or when an emergency in a particular component society requires personal attention, and shall, with the advice of the proper officers, Councilors and committees, keep the officers of the component societies informed about the activities of this Society and of the medical profession in general by the issuance of bulletins. He shall keep in close touch with all pending or enacted legislation, with all activities of governmental offices and agencies affecting the medical profession and public health, and shall keep this Society fully informed concerning such legislative and governmental activities. He shall conduct the official correspondence of this Society, and shall sign all authorized communications. He shall notify all members of meetings, officers of their election, and committees of their appointment and duties. He shall act as business manager of THE JOURNAL OF THE KAN-SAS MEDICAL SOCIETY under supervision of the Editorial Board, and in a similar capacity to the extent authorized for other publications of this Society. Upon authorization by the Committee on Scientific Work, he shall prepare and issue an official program for each annual session. He shall supply the component societies with necessary forms and blanks for conducting their official business with this Society. He shall perform any additional duties as may be required by the House of Delegates, the Council, their representative committees, or the President. He shall employ such assistants as the House of Delegates, the Council, or their representative committees, may direct. He shall be under the employ of the Council, or its representative committee, and in the case of his death, resignation, or removal the Council, or its representative committee, shall have the power to fill the vacancy. The amount of his salary shall be fixed by the Council, or its representative committee, with approval by the House of Delegates. He shall be allowed traveling expenses to the extent approved by the Council. He shall use the revolving fund provided for his convenience with due regard for efficiency and good business judgment in the furtherance of the work entrusted to his care. He shall be bonded at the expense of this Society in such amount as the Council may require.

thereon shall accompany the Executive Secretary's annual

Chapter VIII .- The Council.

Section 1. In the interim between the annual meetings of the House of Delegates, unless a special session should be called, the Council, or the Executive Committee of the Council, shall have general charge of all the business affairs of this Society. To this end the Council, or the Executive Committee, may take any action not in conflict with a former action of the House of Delegates as

may be necessary to meet previously unforeseen situations, and may exercise in such cases the full power of the House of Delegates: Provided, that the Council, or the Executive Committee, may not act to bind this Society in any way beyond the next annual meeting of the House of Delegates.

Sec. 2. The Council shall be the board of censors of this Society. It shall consider all questions involving the rights and standing of members, whether in relation to other members, to the component societies, or to this Society. All questions of an ethical nature brought before the House of Delegates, or a general or section meeting, shall be referred to the Council without discussion. It shall hear and decide all questions of discipline affecting the conduct of members or component societies on which an appeal is taken from the decision of an individual Councilor, and its decision in such matters shall be final.

Sec. 3. It shall make careful inquiry concerning the condition of the profession in each county of the state, and shall have authority to adopt such methods as may be deemed most efficient for improving and increasing the interest in the component societies and for organizing the profession in counties where component societies do not exist. It shall especially and systematically endeavor to promote friendly intercourse among physicians of the same locality, and shall continue these efforts until every physician in every county of the state, who can be made ethical, has been brought under medical society influence.

Sec. 4. In sparsely settled sections of the state it shall have authority to organize the physicians of two or more counties into multi-county societies, to be suitably designated so as to distinguish them from district societies, and these societies when organized and chartered shall be entitled to all the rights and privileges provided for component societies until such counties shall be organized separately.

Sec. 5. It shall, when the best interests of this Society and the medical profession will be promoted thereby, organize in each Councilor District a district medical society, and members of the component societies in that district, and no others, shall be members in such societies.

Sec. 6. It shall encourage postgraduate and research work as well as home study, and shall endeavor to have the results utilized and intelligently discussed in the component societies.

Sec. 7. All applications for charters of component societies must be presented to the Council together with recommendations by the Councilor in that district. Component society charters shall be issued and signed by the President and Secretary after the application has been approved by the Council.

Sec. 8. It shall provide for and superintend the publication and distribution of all proceedings, transactions and memoirs of this Society, and may delegate these functions to officers, committees, or boards as is deemed expedient.

Sec. 9. It shall have power to create committees from its number, and to endow them with authority to act in the interim between meetings of the Council upon any specific matters which would ordinarily require special meetings of the Council. These committees may be augmented by appointment of additional members of this Society who are not Councilors as may be desired.

Sec. 10. All moneys of this Society received by the Council, or its authorized representatives, must be duly accounted and paid to the treasurer. The Council shall have power to inspect or audit the accounts of the treas-

urer, other officers, the boards, or committees of this Society, and shall see that annual reports are made to the House of Delegates on all matters pertaining to the finances or expenditures of this Society.

- Sec. 11. In the event of a death, resignation, or removal in the office of the second Vice President, Secretary, Treasurer, or a Councilor, the Council shall elect a successor to fill the vacancy until the next annual meeting of the House of Delegates.
- Sec. 12. The Council shall meet daily during each annual session, and at its meeting on the last day of each session shall outline and organize the work of this Society for the ensuing year.
- Sec. 13. Other meetings of the Council may be called at any time during the year by the President upon reasonable notice, or upon petition of five members of the Council.
- Sec. 14. Nine members of the Council shall constitute a quorum.
- Sec. 15. The Councilor Districts shall be comprised of the following counties:

First District: Marshall, Nemaha, Brown, Doniphan, Pottawatomie, Jackson, Atchison and Jefferson Counties. Second District: Leavenworth, Wyandotte, Douglas,

Johnson, Franklin, Miami, Anderson and Linn Counties.

Third District: Woodson, Allen, Bourbon, Wilson, Neosho, Crawford, Montgomery, Labette and Cherokee Counties.

Fourth District: Wabaunsee, Shawnee, Morris, Chase, Lyon, Osage, and Coffey Counties.

Fifth District: Barton, Stafford, Rice, Reno, McPherson, Harvey and Marion Counties.

Sixth District: Kingman, Harper, Sedgwick, Sumner, Butler, Greenwood, Cowley, Elk and Chautauqua Counties.

Seventh District: Jewell, Republic, Washington, Mitchell, Cloud, Clay and Riley Counties.

Eighth District: Lincoln, Ellsworth, Ottawa, Saline, Dickinson and Geary Counties.

Ninth District: Cheyenne, Sherman, Wallace, Rawlins, Thomas, Logan, Sheridan, Gove, Decatur and Norton Counties.

Tenth District: Graham, Trego, Phillips, Rooks, Ellis, Smith, Osborne and Russell Counties.

Eleventh District: Ness, Rush, Hodgeman, Pawnee, Edwards, Kiowa, Comanche, Pratt and Barber Counties.

Twelfth District: Greeley, Wichita, Scott, Lane, Hamilton, Kearney, Finney, Stanton, Gray, Grant, Haskell, Ford, Morton, Stevens, Seward, Meade and Clark Counties.

Sec. 16. Each Councilor shall be elected by a caucus of delegates present from the several component societies within his district, and the results of the caucus shall be reported to the House of Delegates at a proper time during the election of officers.

Sec. 17. Each Councilor shall be an organizer, peace-maker and censor for his district. He shall visit the component societies in his district at least one a year for the purpose of inquiring into the condition of the profession, and for improving and increasing the zeal of the component societies and their members. He shall make an annual report relating to his work and to the condition of the profession in each county of his district at the annual meeting of the House of Delegates.

(Concluded in Next Issue)

CARDIAC PAIN (Continued from Page 17)

or regurgitation, mitral stenosis, pulmonic stenosis, adherent pericarditis, paroxysmal tachycardia, paroxysmal auricular flutter or fibrillation, permanent auricular fibrillation or flutter, permanent coronary narrowing due to arteriosclerosis); B. nervous heart pain, including effort syndrome, C. paroxysmal heart pain, the so-called true angina-pectoris; D. pain of coronary thrombosis; E. aortic pain of syphilitic aortitis and aneurysm; F. pain of pericarditis.

- 2. Cardiac pain is an outstanding and essential symptom in angina pectoris and coronary thrombosis; whereas, in the other conditions covered by the latter classification, pain may or may not be present.
- 3. In doubtful cases the therapeutic test may be of great value in the diagnosis. The simple type of pain will as a rule be effected by rest, or digitalis, or both. The nervous type of heart pain is generally relieved by bromides and sedatives. The pain of angina pectoris is relieved by nitrites. No drug other than morphine will relieve the pain of a coronary thrombosis and in some cases even this does not give complete relief. Aortic pain is usually relieved by antisyphilitic therapy (especially KI). For the pain of pericarditis, counter irritation or an ice bag over the precordium is usually quite effective in affording relief.
- 4. Of the various types of heart pain, it seems that there should be little difficulty in diagnosing the average case, excepting in those cases classed as the "Simple Fatigue Pains". In the class of "Simple Fatigue Pain" pain is not generally an outstanding symptom.
- 5. There are a few types of pain of extracardiac origin which closely simulate pain of true cardiac origin and which require the most careful observation and study in their differentiation.
- 6. Keefer and Resnick, in advancing their theory of oxygen lack, as an explanation of angina pectoris, seem to have clarified the subject.
- 7. The electrocardiographic findings are definite in most all cases of cardiac involvement, excepting in angina pectoris where the E.K.G. is of very little value in a clinical diagnosis. In angina pectoris negative findings mean nothing and must be disregarded while any change, no matter how trivial, may be of great importance.

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It is not much trouble to doctor sick folks, but to doctor healthy ones is troublesome. -- H. W. Shaw.

He who wants to do a great deal of good at once, will never do anything.—Samuel Johnson.

NEWS NOTES

SPECIAL MEETING

Dr. H. L. Snyder has called a special meeting of presidents, secretaries, delegates, and other members to be held at the Hotel Jayhawk in Topeka on January 24, commencing at 1:30 p.m. The meeting will be one of the most important the Society has ever held inasmuch as several vital matters pertaining to legislation and medical economics will be discussed and decided.

All members are invited to attend.

DUES

Official membership report blanks for 1937 were forwarded to the secretaries of the county medical societies on January 7.

The State Society dues for 1937 will be \$10.00 per member, which represents the same amount as in 1935 and 1936 with the exception that pursuant to the action taken by the last House of Delegates, the accrual of \$2.00 per member from the Defense Fund reserve will not be utilized this year.

Total membership of the Society for 1936 was 1495 as compared with 1285 in 1934 and 1428 in 1935.

All members are requested to remit 1937 dues to the county medical society secretary as soon as possible in order that membership reports may be completed promptly.

OSTEOPATHIC CASE

The case pending in Riley County to determine the rights Kansas osteopaths have to practice medicine and surgery had been set for trial during the week of January 17.

However, due to the fact that the clerk of the Riley County District Court recently committed suicide, there is possibility that the confusion which this has brought about will cause a postponement of the January term of that court.

Officials of the Society are now conferring with the Attorney General, Mr. Scott Pfuetze, County Attorney of Riley County, and other persons, in the interest of attempting to have the case heard at a special hearing within the next several weeks. Whether or not this can be done is not certain at this time.

BASIC SCIENCE PAMPHLET

A pamphlet pertaining to basic science laws and the need for a law of this kind in Kansas, was issued by the Committee on Public Policy on December 13. Individual copies were forwarded to all members of the Society and a supply of additional copies was sent to each county medical society secretary.

Recommendation was made that the pamphlet be used as a basis for additional discussion with legislators and also for securing endorsement from lay groups.

The committee has received a large number of congratulatory letters from other state medical societies for the effectiveness of this pamphlet, and requests have

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been received from Michigan State Medical Society, Utah State Medical Association, Oklahoma State Medical Association, and New Mexico Medical Society for permission to utilize the data in verbatim form.

BOARD OF REGENTS

Governor Alfred M. Landon announced on November 15 the appointment of Dr. H. L. Snyder, Winfield, for a four-year term on the State Board of Regents.

This board has under its supervision all affairs incidental to state schools.

Additional comment on Dr. Snyder's appointment is contained in an editorial elsewhere in this issue.

CONFERENCE

Dr. H. L. Snyder, Winfield; Dr. E. C. Duncan, Fredonia; Dr. Geo. E. Paine, Hutchinson; Dr. W. N. Mundell, Hutchinson; and Clarence Munns, Topeka, conferred with Governor-Elect Walter Huxman on December 30.

Dr. Snyder on behalf of the Society pledged fullest assistance to Mr. Huxman during his term as governor and offered any aid possible by the Society in developing procedure for handling medical problems involved in the Social Security Act.

BOARD OF REGISTRATION

Governor Alfred M. Landon announced on December 15 the appointment of Dr. J. E. Henshall, Osborne, and the reappointment of Dr. H. E. Haskins, Kingman, to the State Board of Medical Registration and Examination. Both appointments are for four years.

SOCIAL LEGISLATION

Representatives of the Society were invited to attend a joint conference of social workers and county commissioners in Topeka on January 7 to discuss a proposed Enabling Act for the Social Security Act in Kansas.

The following suggestions offered by the Society at the meeting were incorporated into the proposed bill adopted at the meeting:

A provision that licensed doctors of medicine and county medical societies shall not be classified as private agencies to be supervised by the State Board of Social Welfare.

Elimination of a clause which would have placed county health officers under social worker supervision.

1937 STATE MEETING

A considerable amount of the preparations have been completed for the 1937 state meeting to be held in Topeka on May 3, 4, 5, and 6. Final arrangements have been made for the general and section meetings to be held in the Masonic Temple and for the annual banquet to be held at the Topeka High School. Scientific program acceptances have been received to date from Dr. Elliot P. Joslin, Boston, Massachusetts; Dr. Russell Haden, Cleveland, Ohio; Dr. Claude Dixon, Rochester,

Minnesota; Dr. P. C. Jeans, Iowa City, Iowa; Dr. Herbert J. Rinkle, Kansas City, Missouri; and Dr. W. M. Ketcham, Kansas City, Missouri. Commercial exhibit announcements were forwarded on January 2 and reservations have already been made by ten concerns. Extensive plans are being made for the largest scientific exhibit section the Society has ever had. All members interested in presenting scientific exhibits are invited to correspond with Dr. F. C. Taggart and Dr. A. J. Brier, Topeka.

Since the 1937 meeting represents a two-year meeting, it is believed all past attendance records will be surpassed.

COMMITTEE MEETINGS

A meeting of the Committee on Public Policy was held at the Allis Hotel in Wichita on December 15. Members present were: Dr. H. L. Snyder, Winfield; Dr. E. C. Duncan, Fredonia; Dr. J. F. Gsell, Wichita; Dr. L. D. Johnson, Chanute; Dr. C. L. Hooper, Dodge City; Dr. W. F. Bernstorf, Winfield; Dr. G. B. Morrison, Wichita; Dr. T. C. Kimble, Miltonvale; Dr. F. L. Loveland, Topeka; Dr. G. O. Speirs, Spearville; Dr. R. L. Von Trebra, Chetopa.

Foremost events of the meeting were:

Discussion with George Sheron, Topeka, Walter Ayers, Topeka, J. J. Moeller, Wilson, and C. L. Boling, Wichita, Chiropractor-physio-therapists, toward possibility for securing endorsement by the Society of a Kansas Physio-Therapy Licensure Act.

Approval of several requests by other state medical societies to utilize the basic science pamphlet in verbatim form.

Discussion of the proposed Kansas basic science law and several recommended changes therein.

A recommendation to the President that a state meeting of presidents, secretaries, and delegates of county medical societies be held early in January for discussion of legislative activities.

A joint meeting of the Medical Economics Committee and its sub-committee on Social Security Act was held at the Hotel Wareham in Manhattan, on December 27.

Members present were: Dr. H. L. Snyder, President; Dr. F. L. Loveland, Topeka, Chairman; Dr. B. A. Nelson, Manhattan, vice-chairman; Dr. O. W. Davidson, Kansas City; Dr. W. N. Mundell, Hutchinson; Dr. D. A. Bitzer, Washington; Dr. D. M. Diefendorf, Waterville; Dr. Geo. O. Speirs, Spearville; Dr. W. R. Dillingham, Salina, and Dr. J. F. Gsell, Wichita. Dr. T. C. Kimble, Miltonvale, and Dr. W. M. Mills, Topeka, were also present.

Discussion mainly pertained to medical problems involved in old age assistance, aid for the blind, aid for dependent children, unemployment insurance, state welfare boards and county welfare boards under the Social Security Act; and several recommendations therein were prepared for presentation to the legislature.

A meeting of the Medical Advisory Committee for Norton Sanitarium was held at the Board of Administration office in Topeka on January 4.

Members present were: Dr. H. L. Snyder, Winfield, Chairman; Dr. C. F. Taylor, Norton; Dr. S. Murdock,

Old Way...

CURING RICKETS in the CLEFT of an ASH TREE

FOR many centuries,—and apparently down to the present time, even in this country—ricketic children have been passed through a cleft ash tree to cure them of their rickets, and thenceforth a sympathetic relationship was supposed to exist between them and the tree.

Frazer* states that the ordinary mode of effecting the cure is to split a young ash sapling longitudinally for a few feet and pass the child, naked, either three times or three times three through the fissure at sunrise. In the West of England, it is said the passage must be "against the sun." As soon as the ceremony is performed, the tree is bound tightly up and the fissure plastered over with mud or clay. The belief is that just as the cleft in the tree will be healed, so the child's body will be healed, but that if the rift in the tree remains open, the deformity in the child will remain, too, and if the tree were to die, the death of the child would surely follow.

*Frazer, J. G.: The Golden Bough, vol. 1, New York, Macmillan & Co., 1928



It is ironical that the practice of attempting to cure rickets by holding the child in the cleft of an ash tree was associated with the rising of the sun, the light of which we now know is in itself one of Nature's specifics.

New Way...

Preventing and Curing Rickets with OLEUM PERCOMORPHUM

NOWADAYS, the physician has at his command, Mead's Oleum Percomorphum, a natural vitamin D product which actually prevents and cures rickets, when given in proper dosage.

Like other specifics for other diseases, larger dosage may be required for extreme cases. It is safe to say that when used in the indicated dosage, Mead's Oleum Percomorphum is a specific in almost all cases of rickets,

regardless of degree and duration. Mead's Oleum Percomorphum because of its high vitamins A and D content is also useful in deficiency conditions such as tetany, osteomalacia and xerophthalmia.

Mead's Oleum Percomorphum is not advertised to the public and is now obtainable at drug stores at a new economical price in 10 c.c. and 50 c.c. bottles and 10-drop capsules.

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Sabetha; Dr. H. L. Chambers, Lawrence; Dr. F. L. Loveland, Topeka; Dr. Earle G. Brown, Topeka; Dr. J. M. Scott, Board of Administration, Topeka; Mr. W. M. Woodward, Board of Administration, Hutchinson.

Various affairs of the State Sanitarium were discussed and the questions of enlarging the institution to a five hundred-bed capacity was considered.

A. M. A. BULLETIN

The American Medical Association has recently announced that henceforth the Bulletin of that organization will be discontinued. It is planned that instead of the Bulletin, a weekly section consisting of medical economics, legislative, historical, and other information pertaining to the business phases of medical practice will appear in The Journal of the American Medical Association. This change was made with the thought in mind that data of this kind, in addition to the excellent scientific material contained in The Journal, would be of interest to members.

OLD AGE BENEFITS

The following communication just received from the Social Security Board in Washington is reproduced for the information of members:

"Under Treasury Department regulations, employers of one or more persons coming under Federal old-age retirement benefits provisions of the Social Security Act are responsible for the filing of applications for an old-age benefit account number on behalf of their employees. The old-age benefits program goes into effect January 1, 1937.

Employees who have not filed their applications for account numbers either through their employers, through a labor union, or through a local post office, have until midnight Tuesday, December 15, to do so under Treasury regulations.

Regulations No. 91 of the Bureau of Internal Revenue provide that employers after January 1 must make periodic reports to the Bureau in which the account number of each employee will be listed as the means of assuring proper credit to the employee's account for wages earned and taxes paid.

'Inasmuch as employers will eventually have to make sure that every employee has a Social Security Account Number in order to make required reports to the Treasury, it is evident', the Board's statement said, 'that the more employees who file their applications now, the fewer will be the cases in which the employers will have to take action later'.

Circumstances under which employers are required to fill out and file applications for employees are defined by Treasury Decision 4704 as follows:

'If an individual who is an employee on the last day of the period covered by any information return (see articles 402 to 405, inclusive, of Regulations 91) has failed to file an application for an account number on Form SS-5, the employer shall file an application for the employee on or before the tenth day after such last day. If an employee has failed to file an application on Form SS-5 prior to the date he attains age sixty-five, or the date he

dies before attaining age sixty-five, or the date he leaves the service of the employer, the employer shall file an application for the individual on or before the tenth day after such date'.

An employee, according to the Treasury Department's Decision, must advise his employer as to the number of his account as soon as he receives it''.

UNEMPLOYMENT CONFERENCE

Representatives of the Society participated in a conference on unemployment insurance held at the state house in Topeka on December 4, and presided over by the Legislative Council on Unemployment Insurance (Representative Ray Smith, Hoisington; Senator Claude Hansen, Jamestown; Senator Ralph T. Rust, Parsons: Senator Glenn Logan, Topeka; and Representative R. E. Peterson, McPherson.)

The meeting consisted of representatives of various groups interested in this subject, and included a discussion of provisions to be incorporated in a proposed Kansas Unemployment Insurance Act.

Foremost suggestion by the Society was that hospitals and allied institutions should be excepted from a provision requiring that employers of eight or more persons shall pay an unemployment tax.

COUNTY SOCIETIES

The Allen County Medical Society held its annual election of officers in Iola on December 29. The following members were elected to serve during 1937: Dr. H. L. Hendricks, Iola, president; Dr. H. M. Webb, Humboldt, vice president; Dr. F. L. B. Leavell, Iola, treasurer; Dr. C. B. Stephens, Iola, secretary; Dr. J. T. Reid, Iola, censor; Dr. O. L. Garlinghouse, Iola, state meeting delegate, and Dr. H. L. Hendricks, Iola, alternate.

Dr. A. J. Turner, Garnett, was elected president of the Anderson County Medical Society, at a meeting held in Garnett on December 16. Other officers elected are as follows: Dr. J. N. Carter, Garnett, vice president; Dr. J. A. Milligan, Garnett, secretary; Dr. H. F. Spencer, Garnett, state meeting delegate; Dr. C. B. Harris, Garnett, board of censors.

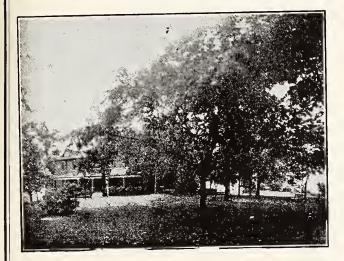
Dr. T. J. Brown, Hoisington, was re-elected president of the Barton County Medical Society at a meeting held in Hoisington on December 15. Dr. L. R. McGill, Hoisington, was also re-elected secretary.

The Bourbon County Medical Society held its annual dinner-meeting in Fort Scott on December 21. Dr. E. R. Deweese and Dr. S. H. Snider, both of Kansas City, Missouri, were the principal speakers. Dr. R. O. Crume, Fort Scott, was elected president of the society for 1937; Dr. R. Y. Strohm, Fort Scott, vice president; Dr. L. L. Cooper, Fort Scott, secretary-treasurer; and Dr. R. L. Gench, Fort Scott, state meeting delegate.

The following officers were elected for 1937 at a meeting of the Butler-Greenwood County Medical Society held in ElDorado on December 19: Dr. G. C. Whitley, Douglas, president; Dr. J. H. Johnson, ElDorado, vice president; Dr. W. E. Janes, Eureka, secretary-treasurer; Dr. Bertram Johnson, Eureka, Dr. R. M. Brian, ElDorado, Dr. S. M. Mallison, Augusta, board of censors.

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Members of the Brown County Medical Society held an election of officers at their meeting in Hiawatha on December 11. Those elected were: Dr. R. M. Wyatt, Hiawatha, president; Dr. V. C. Van Voorhis, Robinson, vice president; Dr. L. C. Edmonds, Horton, secretary; and Dr. H. J. Deaver, Sabetha, censor.

Approximately twenty-five physicians attended a meeting of the Central Kansas Medical Society held in Hays on December 17. Dr. O. A. Hennerich and Dr. J. R. Betthauser, both of Hays, were the principal speakers. Election of officers for 1937 was held and the following were elected: Dr. Ben Mayer, Ellsworth, president; Dr. George Zerzan, Holyrood, vice president; Dr. G. C. Unrein, Hays, secretary-treasurer; and Dr. A. M. McDermott, Ellis, Dr. F. S. Hawes, Russell, and Dr. C. H. Jameson, Hays, censors.

Dr. Wm. M. VanScoyoc, Clifton, will serve as president of the Clay County Medical Society during 1937, following an election of officers held in Clay Center on December9. Others elected were: Dr. G. B. McIlvain, Clay Center, vice president: Dr. F. R. Croson, Clay Center, secretary-treasurer; Dr. E. N. Martin, Clay Center, board of censors; Dr. O. U. Need, Sr., Oak Hill, state meeting delegate. Dr. Robert Algie, Clay Center, was also voted an honorary member of the society. Dr. C. W. Tidd, of the Menninger Clinic, Topeka, presented a paper on "Psychoanalysis".

The Cowley County Medical Society met in Winfield on December 17 for its annual election of officers. Dr. K. Armand Fischer. Arkansas City, was elected president; Dr. R. N. James, Winfield, vice president; Dr. G. O. Giffin, Arkansas City, secretary.

Dr. Graham Asher, Dr. H. M. Gilkey, and Dr. Clarence Kennedy, all of Kansas City, Missouri, were the speakers at a meeting of the Crawford County Medical Society in Pittsburg, on December 4. Their topics were respectively: "Relativity of Digestive Diseases and Coronary Diseases", "Diseases of Children", "School Hygiene". The following officers were also elected: Dr. A. H. Adamson, Arcadia, president; Dr. C. D. Bell, Pittsburg, vice president; Dr. E. J. Schulte, Girard, secretary-treasurer.

At a dinner-meeting of the Douglas County Medical Society held in Lawrence on December 10, Dr. A. S. Anderson, Lawrence, was elected president of that society. Other officers who will serve are as follows: Dr. J. B. Henry, Lawrence, vice president; Dr. E. M. Owen, Lawrence, treasurer; Dr. J. M. Mott, Lawrence, secretary; Dr. G. M. Liston, Baldwin, board of censors. Dr. Ralph Fellows and Dr. R. W. Robb, of the Osawatomie State Hospital, and Dr. R. B. Stafford, of the Kansas State Board of Health, Topeka, presented papers.

The Ford County Medical Society met in Dodge City on December 18 with the following speakers and topics on the program: Dr. C. Lee Wilmoth, Denver, Colorado, "Gastric and Duodenal Ulcers from a Surgical Standpoint"; Dr. Thomas D. Cunningham, Denver, Colorado, "Gastric and Duodenal Ulcers from a Medical Standpoint".

Members of the Franklin County Medical Society held their thirty-fifth annual banquet in Ottawa on December 30. Dr. Lyle S. Powell, Lawrence, presented a moving picture taken on his recent trip to India and the Orient. Dr. L. V. Dawson, Ottawa, will serve as the new 1937 president; Dr. George W. Davis, Ottawa, as secretary, and Dr. P. R. Young, Ottawa, as treasurer.

The regular quarterly meeting of the Golden Belt Medical Society was held in Salina on January 7. Speakers and subjects were as follows: Dr. R. A. West, Wichita, "Post-partum Care of the Cervix with Special Reference to Carcinoma Prophylaxis"; Dr. Joe V. Van Cleve, Wichita, "The Skin and Syphilis"; Dr. John L. Kleinheksel, Wichita, "Modern Trends in Diabetes"; Dr. E. S. Edgerton, Wichita, "Malignancies of the Large Bowel". A dinner followed the scientific meeting.

The Harvey County Medical Society met in Newton on December 21 and elected the following officers for 1937: Dr. H. R. Schmidt, Newton, president; Dr. D. V. Conwell, Halstead, vice president; Dr. M. C. Martin, Newton, secretary-treasurer; Dr. G. A. Westfall, Halstead, and Dr. R. H. Hertzler, Halstead, state meeting delegates; and Dr. R. S. Haury, Newton, Dr. M. C. Martin, Newton, and Dr. W. F. Koons, Halstead, censors.

Dr. A. S. Reece, Gardner, was elected president of the Johnson County Medical Society at a meeting of that society in December. Other officers elected were as follows: Dr. Edmer Beebe, Olathe, vice president; Dr. Frank E. Tolle, Overland Park, secretary-treasurer; Dr. H. R. Wahl, Kansas City, state meeting delegate; Dr. J. B. Weaver, Kansas City, and Dr. J. A. Knoop, Olathe, board of censors.

Dr. R. W. Urie, Parsons, was re-elected president of the Labette County Medical Society at a meeting in Parsons on December 23. Other officers also re-elected were as follows: Dr. Charles Miller, Parsons, vice president; Dr. A. C. Baird, Parsons, secretary-treasurer; Dr. R. L. Von Trebra, Chetopa, censor; Dr. O. E. Stevenson, Oswego, state meeting delegate.

Members of the Leavenworth County Medical Society met in Leavenworth in December for their annual election of officers. Those elected were: Dr. C. A. Bennett, Leavenworth, president; Dr. R. H. Moore, Lansing, vice president; Dr. W. L. Pratt, Leavenworth, secretary-treasurer.

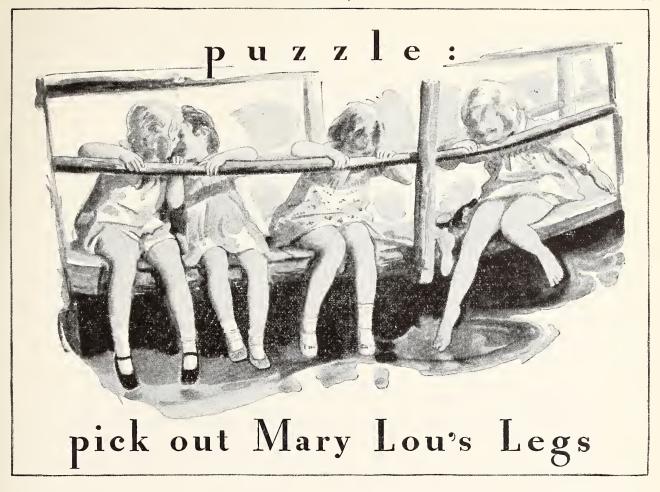
The Marshall County Medical Society met in Marysville on December 14 with Dr. W. W. Wadell. Beatrice, Nebraska, as the principal speaker.

The Meade-Seward County Medical Society held a meeting and a free clinic for women and children in Liberal on December 11. Dr. James W. Hendrick and Dr. J. R. Lemmon, both of Amarillo, Texas. conducted the clinic and spoke at the meeting. Their subjects were respectively "Pelvic Pains" and "Diseases of Children".

The Montgomery County Medical Society met in Independence on December 11. Mr. J. H. Clement, Superintendent of the local schools, spoke on the program, which included several musical numbers and a short play.

Dr. E. C. Bryan, Erie, was elected president of the Neosho County Medical Society at a meeting in Chanute on December 17. Other officers for 1937 are as follows: Dr. Ralph Light, Chanute, vice president; Dr. James Butin, Chanute, secretary-treasurer.

Thirty-five physicians attended the meeting of the Pawnee County Medical Society in Larned on December



Mary Lou had rickets when she was a baby. Once that might have made her easy to identify! But now doctors know how to treat rickets effectively, and they know what to do

to prevent it. Promptly treated, rickets seldom results in bow legs or knock knees. So the answer to our puzzle is—you can't pick out Mary Lou!

Fewer children with iron braces! More children with legs as straight and handsome as young saplings! Fewer hollow

chests! More well-shaped jaws and pleasing little profiles! These are some of the advantages which modern developments in vitamin medication—especially vitamins A and D—have made possible.

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8. Dr. Ralph Bowen, Oklahoma City, Oklahoma, spoke on "Allergic Problems and Their Control".

Members of the Pratt County Medical Society met with the womens' auxiliary of that society for a dinner-meeting in Pratt on December 18. Election of officers for 1937 was held as follows: Dr. E. M. Ireland, Coats, president; Dr. George Cody, Sawyer, vice president; Dr. Athol Cochran, Pratt, secretary-treasurer; Dr. Ireland, and Dr. J. R. Campbell, Pratt, state meeting delegates.

The Reno County Medical Society met in Hutchinson in December for its annual election of officers. Those elected were: Dr. G. A. Chickering, Hutchinson, president; Dr. C. W. Haines, Haven, vice president; Dr. W. N. Mundell, Hutchinson, Secretary; Dr. Hunter W. Duvall, Hutchinson, board of censors.

The annual election of officers was held at the regular monthly meeting of the Saline County Medical Society in Salina on December 10. Those who will serve during 1937 are as follows: Dr. L. S. Nelson, Salina, president; Dr. E. M. Sutton, Salina, vice president; Dr. Maurice Snyder, Salina, secretary; Dr. O. R. Brittain, Salina, treasurer.

Sedgwick County Medical Society held its annual banquet-meeting on December 15 in Wichita, with Dr. Olin West, Secretary of the American Medical Association as the speaker. Dr. J. W. Shaw, Wichita, was also installed as president for 1937.

Dr. M. E. Pusitz, Topeka, spoke on "Injuries to the Cervical Spine" at the regular monthly meeting of the Shawnee County Medical Society in Topeka on January 4. Dr. Earle G. Brown, Topeka, newly elected president of the society, and Dr. F. C. Taggart, Topeka, secretary, were installed at this meeting.

Dr. Graham Asher, Kansas City, Missouri, Dr. Terry Leilly, Kansas City, Missouri, and Dr. James B. Weaver, Kansas City, Kansas, were the principal speakers at a meeting of the Southeast Kansas Medical Society in Chanute on December 8. Their topics were respectively "Unusual Disease of the Circulation", "Diagnosis and Treatment of Thyroid Disease Based upon the Classified Pathology"; and "Management of Fractures of the Arms, Especially Involving the Elbows".

The Sumner County Medical Society met in Wellington on December 10 for a banquet-meeting. The program included a movie travelogue and several musical numbers.

Members of the Washington County Medical Society met in Washington on December 8 for the annual election of officers. Those elected were: Dr. H. G. Hurtig, Hanover, president; Dr. D. A. Bitzer, Washington, secretary-treasurer.

Approximately fifteen members attended the meeting of the Wilson County Medical Society held in Fredonia on December 14. Officers elected to serve during 1937 were as follows: Dr. H. E. Morgan, Fredonia, president; Dr. B. P. Smith, Neodesha, vice president; Dr. E. C. Duncan, Fredonia, secretary-treasurer; Dr. J. W. McGuire, Neodesha, state meeting delegate.

The Wyandotte County Medical Society met in Kansas City on December 15 for its annual election of officers.

Those elected were: Dr. Lewis W. Angle, president; Dr. C. J. Mullen, vice president; Dr. J. H. Luke, secretary; Dr. Thomas Richmond, treasurer; Dr. H. H. Hesser, censor; Dr. O. W. Davidson and Dr. L. L. Bresette, state meeting delegates, all of Kansas City.

MEMBERS

- Dr. L. G. Balding, Manhattan, has gone to Italy and southern France where he will take postgraduate courses in the medical centers of those countries.
- Dr. J. L. Dixon, formerly of Clay Center, who is now teaching and doing research work at the Tulane University of Louisiana, in New Orleans, was recently elected to the American College of Surgeons.
- Dr. D. V. Dougherty, formerly of Coldwater, has moved to Binghampton, New York, where he has been employed by the Endicott-Johnson Shoe Company for general medical work among the 19,000 employees, and will also take a postgraduate course in the University of Pennsylvania, and the Columbia University at New York.
- Dr. K. L. Druet, Salina, has been elected to membership in the American College of Physicians.
- Dr. R. F. Kippenberger and Dr. H. P. Palmer opened a new hospital in Scott City on December 6. The building includes physicians offices, an operating room, a nursery, five private rooms, two three-bed wards, nurses quarters, a laboratory, and a kitchen.
- Dr. E. C. Petterson, formerly of Palco, has moved to Plainville, where he will continue his practice.
- Dr. Arthur J. Revell, Pittsburg, was elected to membership in the American College of Physicians on December 13.

The Hershner Hospital at Esbon was destroyed recently by fire. The institution is now being rebuilt and is expected to be ready for occupancy by March 1. Temporary quarters have been established.

DEATH NOTICES

Dr. George Henry Allen, 56 years of age, died at Stormont Hospital in Topeka on December 18. Dr. Allen was born at Harlan. Iowa, in 1880 and attended grade and high schools in that city. He received his medical training at the University of Iowa from which he graduated in 1908. He first practiced in Clarkson, Nebraska, and moved to Topeka in 1910 where he was associated for a while with the Santa Fe Hospital. He studied in Vienna during 1913 and subsequently opened an office in Topeka where he specialized in eye, ear, nose, and throat until the time of his death. He was a member of the Shawnee County Medical Society.

Dr. William Franklin Fee, 73 years of age, died on November 29 at his home in Meade. Dr. Fee was born in 1863 at Ontario, Canada, and moved to the United States at the age of sixteen. He received his degree in medicine from the University of Illinois School of Medicine in 1893 and spent several years internship in Chicago. Following this he practiced in Williamsburg for a few years and then moved to Meade in 1898. He

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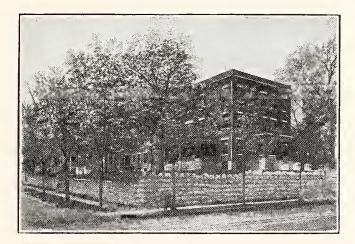
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was a former Councilor of the Society and a member of the Meade-Seward County Medical Society.

Dr. Clarence Lucias Miller, 59 years of age, died at his home in Topeka on December 10. He was born in 1877 and received his medical training at the Ensworth Medical College, St. Joseph, Missouri. Dr. Miller had served in the Spanish-American War and also in the World War. He had practiced in Olpe and Hamilton and had served as Director of the Division of Vital Statistics of the Kansas State Board of Health since 1931. He was a member of the Shawnee County Medical Society.

Dr. David Lloyd Morgan, 61 years of age, died on November 30 at his home in Emporia. Dr. Morgan was born in 1875 at Carmarthenshire, South Wales, and moved to Emporia with his family at the age of seven years. He became a registered pharmacist at the age of eighteen and worked in that profession until the age of twenty-four when he decided to study medicine. He received his medical education at the Louisville Medical College, Louisville, Kentucky, and commenced practice in Emporia following his graduation. He served as an officer in the Medical Corps during the World War. He was a member of the Lyon County Medical Society.

Dr. Elam Albert Reeves, 65 years of age, died at his home on December 5. He was born at Fairbury, Illinois, in 1871. Dr. Reeves attended the University Medical College at Kansas City, Missouri, from which he graduated in 1903. He had practiced in Kansas City from the time of his graduation until his death. He was a member of the Wyandotte County Medical Society.

MORBIDITY REPORT

New communicable disease cases in the state as compared with last month are reported by the Kansas State Board of Health as follows:

Disease	Month ending December 26	Month ending November 28
Scarlet Fever	894	705
Chickenpox	433	336
Mumps	426	277
Pneumonia	274	165
Whooping Cough	84	66
Tuberculosis	58	83
Syphilis	56	91
Diphtheria		112
Measles	37	16
Smallpox	36	26
Gonorrhea	29	87
Typhoid Fever	14	20
Undulant Fever	13	22
Poliomyelitis	10	21
Erysipelas	10	7
Influenza		12
Meningitis		4
Cancer		16
Vincent's Angina	4	12
German Measles		2
Septic Sore Throat	3	5
Encephalitis		3

NEW BOOKS RECEIVED

THE 1936 YEAR BOOK OF GENERAL MEDICINE—Edited by Dr. George F. Dick, Dr. George R. Minot, Dr. William B. Castle, Dr. William D. Stroud, and Dr. George B. Eusterman. Published by the Year Book Publishers, Chicago, Illinois, at \$3.00 per copy.

MODERN TREATMENT AND FORMULARY—By Dr. Edward A. Mullen, assistant professor pharmacology and physiology, Philadelphia College of Pharmacy and Science. Published by the F. A. Davis Company, Philadelphia, at \$5.00 per copy.

ALLERGIC DISEASES — THEIR DIAGNOSIS AND TREATMENT—By Dr. Ray M. Balyeat, associate professor of medicine and lecturer on diseases due to allergy, University of Oklahoma Medical School. Published by the F. A. Davis Company, Philadelphia, at \$6.00 per copy.

APPLIED DIETETICS—By Dr. Sanford Blum, head of department of pediatrics, and director of research laboratory, San Francisco Polyclinic and Post Graduate School, San Francisco, California. Published by the F. A. Davis Company, Philadelphia, at \$4.75 per copy.

PRACTICE OF MEDICINE—By Dr. J. C. Meakins, professor of medicine and director of department of medicine, McGill University, Montreal, Canada. Published by the C. V. Mosby Company, St. Louis, Missouri, at \$10.00 per copy.

THE 1936 YEAR BOOK OF GENERAL SURGERY—By Dr. Evarts A. Graham, professor of surgery, Washington University School of Medicine. Published by The Year Book Publishers, Chicago, Illinois, at \$3.00 per copy.

KEEPING YOUR CHILD NORMAL—By Dr. Bernard Sachs, Former President, New York Academy of Medicine, New York. Published by Paul B. Hoeber, Inc., New York, at \$1.50 per copy.

TEXTBOOK OF GENERAL SURGERY—By Dr. Warren H. Cole, professor of surgery, University of Illinois College of Medicine; and Dr. Robert Elman, associate professor of surgery, Washington University School of Medicine, St. Louis, Missouri. Published by D. Appleton-Century Company, Inc., New York, at \$10.00 per copy.

THE SEPTEMBER 1936 MEDICAL CLINICS OF NORTH AMERICA—Voulme 20, Number 2 St. Louis Number. Published by the W. B. Saunders Company, Philadelphia, Pennsylvania, at \$12.00, paper and \$16.00 cloth, per copy.

UROLOGICAL ROENTGENOLOGY — By Dr. Miley B. Wesson, ex-president American Urological Association, and Dr. Howard E. Ruggles, roentgenologist to University of California Hospital and clinical professor of roentgenology, University of California Medical School. Published by Lea & Febiger, Philadelphia, Pennsylvania, at \$5.00 per copy.

THE 1936 YEAR BOOK OF UROLOGY—By Dr. John H. Cunningham, associate in genito-urinary surgery Harvard University Postgraduate School of Medicine. Published by The Year Book Publishers at \$2.50 per copy.



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AUXILIARY

Edited by Mrs. W. G. Emery, Press Publicity Chairman

The maximum assistance to the Medical Society by the Auxiliary will be given only when our membership corresponds in number to that of the Medical Society, and when that membership is actively aggressive in public relations work.

Of the two factors public relations work is the more important, for, if medical laws are to be passed or amended or eliminated, there must be a public demand for such. There will be no public demand until the people are convinced that their interests are involved. The laity as a whole, is very poorly informed as to medical philosophy and purposes. Therefore it is incumbent upon our public relations committees in every county auxiliary to exert themselves actively. Let me quote from the Hand Book for State Auxiliaries: "A well schooled Auxiliary group reaches out into every phase of woman's organization work. The doctor's wife takes a part, and generally a prominent part, in public welfare work, parent-teacher work and federated club activities".

The health programs of all these groups become more and more extensive each year. Frequently they are unwise and subject to cultist exploitation of the worst sort and the county medical society and the physician himself are powerless to interfere. The doctor's wife, as a board member or officer or worker in the organization can and will interfere if she has behind her, her own educated and informed Auxiliary, advised and instructed by a council of the Medical Society. She becomes the doctor's representative and ally. The Auxiliary is, a liason body which may well be molded into an important aid to the public health program of the society.

If our auxiliaries are to become effective allies of the Medical Society in legislative work they must first become fully informed themselves in order to carry authority of opinion into lay organizations.

The Kansas legislature is meeting as this issue of The Journal is coming from the press. The Medical Society is vitally interested in the passage of a basic science act. So thoroughly has the Medical Society distributed its literature on this subject that auxiliaries educational work is greatly simplified. The Medical Society has asked us to participate in this legislative effort. If we will work, we shall win.

The objection to an ambitious program is often raised in small county auxiliaries, that no such work can be done because their members are too few. To encourage such auxiliaries let me quote Mrs. David S. Long, First Vice-President of the National Auxiliary in the October, 1936, News Letter:

"The question is often asked 'How can we interest more doctor's wives in our organization'? And my answer is 'Don't spend too much time trying to sell an idea to an adult'. The majority of people have fixed ideas by the time they are twenty-five or thirty. It does not take numbers of women to make a successful organization. I know one organization of ten women with about four of them active and yet they carry through the full national program and sponsor an essay contest each

year besides. It is not quantity but quality of personnel that makes any organization successful".

Later on she says "Last May at the close of the wonderful meeting in Kansas City, I had a conversation with one of the outstanding women in the United States. She has served a large metropolitan newspaper for many years and about every six years the newspaper sends her abroad for several months for study, to broaden her outlook and increase her usefulness. She complimented the program of the American Medical Association and then said 'They are the most distinguished lay group in America'."

Such a compliment from a woman of wide experience, education and travel is not to be taken lightly. If this is true of the group to which we are Auxiliary, then we, the members of the Auxiliary, should see that we, too, shall emulate dignity and prestige to this organization in all our work.

The National Hygeia Chairman, Mrs. J. D. Lester, announced in December \$150.00 in prizes to be awarded to county auxiliaries securing the largest number of Hygeia subscriptions during the months of December and January. The contest is open to all county auxiliaries affiliated with state medical societies. All orders postmarked up to and including January 31, 1937, will be counted. Copies of the contest announcement have been sent to the county Hygeia chairman. Your Hygeia chairman has full information.

The State President, Mrs. L. B. Gloyne, asks that county auxiliary treasurers collect dues for 1937 promptly and remit to the State Secretary. Mrs. W. H. Young, Fredonia, Kansas. Only paid up members may be counted in the report to National headquarters. Each organized auxiliary's secretary shall collect dues from each member of their organization, and send to the State Secretary before March 1.

The Labette County Auxiliary met for an advanced session December 8, at the home of Mrs. L. A. Proctor. Reports of the Hygeia contest were given. Mrs. R. W. Urie discussed "The Basic Science Law".

The Sedgwick County Auxiliary held a luncheon meeting in the Innes Tea Room December 14. Their annual christmas party, given by the doctors for their wives, was celebrated December 15. Says Mrs. Frank Emery, Publicity Chairman of the Sedgwick County Auxiliary: "The Auxiliary has opened a new season. It has a splendid group of officers under the leadership of Mrs. Bruce Meeker. If enthusiasm lasts throughout the season as it has begun, this will be one of the greatest and most valuable years in the history of the society".

Sedgwick County Auxiliary distributed Hygeia to the county schools for two years. The results were so beneficial that the distribution was taken over by the county. The Auxiliary then decided to place Hygeias in all the beauty parlors of Wichita.

The Brown County Auxiliary met in the lounge room of the court house at Hiawatha, December 11, following a dinner meeting with the medical society. At this meet-



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* Proc. Soc. Exp. Biol. and Med., 1934, 32, 241-245

Laryngoscope, Feb. 1935, Vol. XLV, No. 2, 149-154

N. Y. State Jour. Med., June 1935, Vol. 35, No. 11

Arch. Otolaryngology, Mar. 1936, Vol. 23, No. 3, 306-309

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ing it was agreed to place Hygeia in the high school libraries of Hiawatha, Horton, and Robinson, also in the Morrill City library.

The Ford County Auxiliary held their regular meeting at the Lora Locke Hotel in Dodge City December 18. Following the business meeting there was a general discussion of the basic science law.

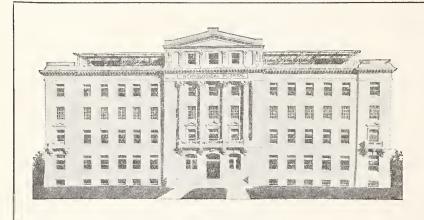
Some of the Kansas county auxiliaries are notable for the continued absence of their reports to this department. No notices of their activities appear in the weekly

or daily papers of their localities. We wonder if their press and publicity chairmen are ill or just super-modest?

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VOL. XXXVIII

FEBRUARY, 1937

No. 2

THE SURGICAL TREATMENT OF GOITRE*

GEORGE B. KENT, M.D.,

and

KENNETH C. SAWYER, M.D.

Denver, Colorado

Disease of the thyroid gland is one of the most interesting subjects in medicine today. The thyroid plays a tremendous part in the normal economy of the body and its functions and dysfunctions should be known by us in order that we may be better able to give the proper advice to unfortunate patients suffering with thyroid imbalance.

Toxic and potentially toxic goitre is a surgical disease and should be treated surgically. One might modify that statement by saying that the surgical removal of all or a portion of the diseased gland is one step and the most important one in the treatment of this type of goitre. The physician who tries to treat goitre with medicine is undoubtedly doing what he thinks best for his patient but his opinions are biased because he has not the opportunity and does not seek the opportunity to observe the excellent and quick results obtained by the surgical treatment of that disease.

Much has been done toward the prevention of goitre and with all the present investigation and study we all hope that some specific medicine or other treatment will soon appear in the medical field that will take the place of surgery but until that time arrives, we must advise the best treatment at hand.

The more one studies diseases of the thyroid, the more impressed one becomes with the effects of the disease upon the cardiovascular system. Dr. Hertzler believes goitre in an individual is a life time disease and the ultimate

outcome in any case is a cardiac death. He arrives at that conclusion after close observation of many cases in his local community seen over a long period of time. Others have made the same observation and some are recommending total ablation of the thyroid in certain heart diseases not due to thyroid intoxication.

We believe that the heart bears the brunt of the intoxication, but the liver, along with other vital organs, is damaged according to the length of time the intoxication has been present in every given case. It seems logical, then, to stop this disease process at the earliest possible moment.

We should practice preventive medicine in regard to goitre, as we do in other fields of medicine, by advising the removal of the supposedly non-toxic nodular goitre.

The basal metabolic rate is useful in certain cases but we believe that too much dependence is placed upon this mechanical device to tell us when and how much mischief is being done in any case. Some use the basal metabolic rate as a measure of all the damage caused by the goitre. We too often see individuals denied the benefit of surgery when their basal metabolic rate is normal or below. This is especially true in the so called non-toxic adenomatous or nodular goitre. The nervous upsets which many times border on melancholia are promptly cured by removal of the nodular masses.

In order to keep thinking clearly on any medical or surgical subject, it is best to keep a detailed history of the case before operation, during convalescence, and close follow-up notes for at least five years following surgery. Nearly all our cases are seen at least once a month for a year following operation and as long thereafter as it is possible to keep in touch with them.

The purpose of this paper is to analyse 321 private surgical cases of disease of the thyroid gland. Our files contain a greater number of

^{*}Read before the Ford County Medical Society, Dodge City, in February, 1936.

cases that show an imbalance of the thyroid gland and one must not forget that just as striking results are obtained in the colloid goitre and the case with hypothyroidism, when properly treated, as in the case which requires surgery. Too frequently patients are referred or come to us with the impression that they have a toxic goitre which should be removed when on examination a colloid goitre or hypothyroidism is found. It would be just as criminally wrong to operate upon these cases as it would be to deny surgery to those who need it. This paper deals only with those diseases of the thyroid demanding surgery.

We thoroughly realize that the end result in any case can not be definitely determined until a lapse of at least five years. The cases forming the basis of this study are not that old, and allowances must be made. None, however, have been under observation for less than twenty-four months following operation. The averages from a study of such a small number of cases are not nearly as accurate as from a greater number, but we can at least learn something about our errors in diagnosis and management and avoid some of these pitfalls in the future.

The classification of disease of the thyroid used in this study is that given by Dr. H. S. Plummer, not because it is any better than the more recent classification by Dr. S. D. Van Matre, but because it is one with which we are more familiar.

A knowledge of a few fundamentals is necessary in the study of diseases of the thyroid gland. A review of the embryology, anatomy, histology and physiology of the thyroid gland may be obtained elsewhere.

COLLOID GOITRE

Colloid goitre usually appears in the adolescent stage of life and is more frequent in the female. The thyroid enlarges under either mental or physical stress. It may reach a large size and become unsightly. Occasionally a tightness is complained of in the throat. The basal metabolic rate is normal or below. As a rule these cases respond readily to treatment with iodine, thyroxin or thyroid extract. Colloid goitre is a surgical disease for cosmetic effects only, and then only after medical treatment has failed. Operation should be postponed until the individual reaches maturity. The reason is self evident. The gland is called upon to deliver an increased amount of its

secretion at this stage in life and by so doing is over worked, in certain cases, and hypertrophy results. The blood supply is markedly increased and the acini of the gland are filled with colloid. Partial thyroidectomy at this time would be deliberate undoing of what nature is trying to do. The administration of thyroid extract and iodine, however, puts the gland at rest and it quickly reduces in size.

Only three cases in this series were operated upon for colloid goitre and only one did not have to take iodine or thyroid extract after partial thyroidectomy.

ADENOMATOUS GOITRE WITHOUT HYPERTHYROIDISM

Adenomatous goitre without hyperthyroidism is an adenomatous enlargement of the thyroid gland which is unattended by any constitutional or metabolic change which can be measured by any known chemical or metabolic test.

A study of the sex incidence of adenomatous goitre without hyperthyroidism showed that eighty-seven per cent of the cases were women and thirteen per cent were men, or roughly in the proportion of 6.7 to 1. Adenomatous goitre without hyperthyroidism usually appears after the age of seventeen. It is first revealed on regression of the colloid, usually between the ages of seventeen and twenty-five years. Because of the absence of constitutional symptoms, the patient gives a long standing history of goitre before coming to operation. In this series the average incidence of adenoma of the thyroid without hyperthyroidism was 42.11 years of age; the extremes being seventeen and seventy-two.

Hypertension is no more frequent in patients with adenomatous goitre without hyperthyroidism than in other individuals of like age. The basal metabolic rate in this type of goitre is within the range of normalcy in most instances and the pulse rate was found to be little affected. The extremes were 70 to 130 beats per minute.

The prophylactic administration of iodine to pregnant women and to school children should prevent adenomatous goitre as well as colloid goitre but while it does cut down the incidence, it is not an absolute prophylactic measure.

Adenomatous goitre without hyperthyroidism should be treated by removal of the adenomatous masses after the age of 25 years. Practically all of the authorities agree that the disease is essentially surgical. We know of no drug or other treatment, x-ray, radium or what not, that will effect the adenoma beneficially. Since Plummer advocated the use of iodine in the treatment of exophthalmic goitre, an occasional case of adenomatous goitre has been acticated by the ill advised use of iodine, and has required surgery. Once the gland has been activated by the ill advised use of iodine, it is prone to continue to hyperfunction even though the iodine may be discontinued. The correct diagnosis of the type of goitre present would prevent many cases of adenomatous goitre from developing hyperthyroidism. It is this type of goitre, once toxicity is initiated, that also causes the marked cardiac and visceral changes which make their appearance so insidiously that the physician must be alert to detect them. It is better to refrain from any treatment other than surgery in this type of case.

Many articles have been written recently by leading students of thyroid diseases in regard to the advisability of partial thyroidectomy in cases of adenomatous goitre without hyperthyroidism. We are accustomed to hearing our patients in this group tell us of the many and varied symptoms that disappear following the removal of a supposedly innocent adenoma. It is impossible to give a logical explanation of some of the results on any basis of our present knowledge of goitre. There is, possibly, some toxin, other than that which raises metabolism, liberated into the blood stream from these adenomatous goitres. Dr. Sloan believes that the peculiar symptoms produced may be due to absorption of the degenerated products, hemorrhage, etc., in the adenoma. According to Plummer, about half of the nontoxic adenomatous goitres usually become toxic when the patient is about forty years of age. The possibility of malignant degeneration must be kept constantly in mind. Lahey believes that the solitary adenoma is especially prone to become malignant.

The site of the adenoma in the inlet of the neck may necessitate its removal to prevent tracheal compression, dislocation into the chest or pressure upon either recurrent laryngeal nerve.

ADENOMA OF THE THYROID WITH HYPERTHYROIDISM

Adenoma of the thyroid with hyperthyroidism is an adenomatous condition of the thyroid gland usually accompanied by an elevated basal metobolic rate and resulting secondary constitutional changes. This is the most common type of goitre. In this series 107 cases of adenoma with hyperthyroidism are reviewed.

Doubtless an occasional case is caused by the too vigorous administration of iodine to an adenomatous goitre without hyperthyroidism. In this series, however, eighty-six per cent of the cases give no history of previous iodine medication. The activating mechanism in these instances is unknown. Family history of goitre was present in thirty-five of the cases of adenoma with hyperthyroidism.

Nervousness, palpitation, fatiguability, goitre, excessive perspiration and weight loss along with a ravenous appetite were the chief complaints of patients in this group of 107 cases.

Toxic adenoma occurs most frequently past middle age, the average being 46.33 years in this group: the sex incidence was sixteen females to one male. The thyroid enlargement is unsymmetrical and cannot be distinguished from adenomata of the thyroid without hyperthyroidism. We found no bruits or thrills in any purely nodular goitre. Substernal projections of the adenomatous masses were found in varying degrees in thirty-seven per cent of this group. The average basal metabolic rate was plus 26.7 per cent.

Adenomatous goitre with hyperthyroidism is usually associated with some degree of hypertension. The average for the 107 cases was systolic 149, diastolic 84. The hypertension is usually due to the hyperthyroidism if the diastolic is not above ninety. A diastolic blood pressure above ninety usually denotes an existing hypertension from some other cause. Increased pulse and tremor are usually present along with a moderate weight loss.

The blood count is of little significance. Plummer, Kocher and others have pointed out that at times a severe secondary anemia may occur both in exophthalmic goitre and in adenoma with hyperthyroidism, which disappears after the disease is arrested. We had one case in this group with a hemoglobin of thirty-two per cent with no other findings than a goitre to account for it.

END RESULTS

There are 107 cases of adenomatous goitre with hyperthyroidism in this series with two deaths. One was due to post-operative hemor-

rhage and the other to heart failure from auricular fibrillation. Both were extremely bad risks and poor judgment was used in attempting surgery. Of the remainder ninety-six or ninety per cent made a perfect recovery and nine are required to take thyroid extract in order to keep the basal rate within normal limits. All of this group, however, are clinically well in regard to toxicity of the thyroid but the permanent changes in the heart and vascular systems will remain and could not be expected to be cured by any measure.

EXOPHTHALMIC GOITRE

Boothby says that "exophthalmic goitre is a constitutional disease apparently due to an excessive, probably abnormal, secretion of an enlarged thyroid gland showing pathologically diffuse, parenchymatous hypertrophy and hyperplasia. It is characterized by an increased basal metabolic rate with the resulting exophthalmos, with a tendency to gastro-intestinal crises of vomiting and diarrhea. The cause of the altered pathology and activity of the thyroid gland is not known".

Exophthalmic goitre is due to excessive activity of the thyroid gland. It occurs most frequently in cities and thickly populated districts, which fact points to emotional stress and strain as possible etiological factors. In many cases focal infection seems to play a part in the etiology. Why these should cause a hyperfunction of the gland is not understood. Excessive feeding of thyroid extract to animals has produced most, but not all, of the phenomena of exophthalmic goitre. For this reason, one must assume that there is an alteration in the nature of the thyroid secretion rather than a mere hyperfunction, that is responsible for exophthalmic goitre, and call the condition a "dysthyroidism". Dessel, Leib, and Hyman have emphasized a group of symptoms which are similar to those of exophthalmic goitre caused by stimulation of the thoraco-lumbar division of the sympathetic nerves. Twenty-nine per cent of the 113 cases of exophthalmic goitre reviewed gave a family history of goitre.

The thyroid gland is enlarged and is usually symmetrical although at times one lobe is larger than the other. There is a marked increase in vascularity. Bruits and thrills are frequently found in the untreated cases. Microscopically the gland shows a diffuse hypertrophy and hyperplasia with a diminished amount of col-

loid. The iodine content of the gland is far below normal.

The chief complaints are variable altho the entire clinical picture is nearly always characteristic in the well developed case. Nervousness, goitre, palpitation, vertigo, loss of strength, especially in the lower extremities, excessive persipration, ravenous appetite, and vomiting and diarrhea in the severe cases are the most usual presenting symptoms.

The sex incidence in this group of 132 cases was seventy-seven per cent women and twenty-three per cent men, making a ratio of 3.34 to 1. The average age incidence was 35.25 years; the extremes being eighteen and sixty-six years.

Exophthalmos, either unilateral or bilateral, was noted in forty-four per cent of the cases. The basal metabolic rate is nearly always elevated in exophthalmic goitre. The average in this series was plus 35.25 per cent and probably would have been higher had it not been that most cases had had iodine treatment before being seen by us.

The average systolic blood pressure was 148 and the average diastolic, seventy-eight with a high pulse pressure of seventy. A rapid pulse, average 113 beats per minute, is a part of the disease. Auricular fibrillation was a very common finding; sixty-six per cent showed a definite tremor while eighty-eight per cent have a history of weight loss varying from five to sixty-five pounds.

END RESULTS

Surgery makes its poorest showing in the exophthalmic goitre but no other method of treatment is equal to surgery in this type of gland. To be successful, however, the surgeon must be radical and remove enough of the gland. The amount to be removed depends upon the age of the patient and the appearance of the gland at the time of operation. Leaving too much gland is probably the chief cause of recurrence of exophthalmic goitre. Of the 132 cases in this group, seventy-seven or fifty-eight per cent were cured. There were four deaths. One occurred suddenly, three hours after completion of the operation. The cause was undetermined but may have been due to liver insufficiency as the patient had had a biliary fistula from the common bile duct for four years. One was a cardiac death from long continued toxicity, complicated by marked edema of the lower extremities and a hydrothorax. One was a very toxic goitre in an insane man

END RESULTS

CASES Classification No	umber	No. Cases	Cured	Per Cent	Taking Thyroid Extract	Per	Taking Iodine	Per Cent	Died	Per Cent	Total Good B & C Results	Per Cent
Exophthalmic Goitre Recurrent Exophthalmic Exophthalmic Goitre in an Adenomatous Goitre	113 13	132	77	58%	38	28%	13	9.8%	4	3.0%	115	87%
Adenomatous Goitre with Hyperthyroidism Recurrent Adenomatous Goitre with Hyperthyroidisn	105 n 2	107	96	90%	9	8.4%	0	0 %	2	1.86 %	105	98%
1. Adenomatous Goitre without Hyperthyroidism 2. Recurrent Adenomatous	73 1	74	67	90%	7	10 %	0	0 %	0	0 %	74	100%
Chronic Thyroiditis		4	0	0	4	100%	0	0 %	0	0 %	4	100%
Acute Thyroiditis		1	1	100%	0	0 %	0	0 %	0	0 %	1	100%
Colloid Goitre		3	1	331/3%	1	331/3%	1	331/3 %	0	0%	2	66 %
Total		321	242	75%	59	18%	14	4.3 %	6	1.86 %	301	96.88%

and one was a large firm, toxic gland in a young man who developed anoxemia necessitating a tracheotomy, which did not prevent delirium, hyperpyrexia and death. Thirteen in the group take iodine periodically and thirty-eight or twenty-eight per cent, take thyroid extract; 115 or eighty-seven per cent received good results. There were thirteen operations for recurrent exophthalmic goitre in this group or 9.84 per cent. All but two had their primary thyroidectomy elsewhere. The percentage of recurrences in our own cases was therefore 1.5 per cent.

THYROIDITIS

Recently Lahey and his associates have divided this condition into three sub-groups: (1) simple, (2) suppurative, and (3) chronic. Acute thyroiditis is considered to be an acute inflammation of the thyroid gland and is nearly always secondary to infection elsewhere in the body. The inflammation may resolve or become purulent, in which case it may become necessary to incise and drain the gland. The destruction of the gland may be followed by hypothyroidism or myxedema according to the amount of the gland preserved. One case in this group was cured by incision and drainage. Chronic thyroiditis is occasionally seen. Riedel was the first to describe this condition in 1898 as "chronic inflammation of the thyroid gland leading to the formation of an iron-hard tumor". Pain is rare. The early cases are without symptoms but there is a remarkable ten-

dency for the tumor to become adherent to and even infiltrate the neighboring structures. It becomes firmly fixed to the trachea, carotid vessels, recurrent nerves and other structures. The skin is rarely involved. Pressure symptoms cause the patient to seek relief. The symptoms are increasing dyspnea with attacks of suffocation, particularly at night, dysphonia or aphonia and sometimes dysphagia. The general health is fairly good and the medical history without special moment. There is no clinical evidence of hypo or hyperthyroidism. picture bears a close resemblance to certain forms of cancer. Most of the cases reported have been diagnosed as malignant, clinically. The cut surface of the gland is hard, smooth, creamy white, opaque and often intersected by fibrous strands but microscopically there is no evidence of malignancy. The only successful treatment is surgery. The end result without operation is slow death by suffocation.

Four cases of chronic thyroiditis (Riedels Struma) are reported in this group of cases. All made good recoveries and are clinically well but all take thyroid extract.

MALIGNANCY

Malignant tumors of the thyroid are found in from one per cent to eight per cent of all cases of goitre. According to Wilson, they fall into four groups: (1) Sarcoma, (2) carcinoma, (3) malignant adenoma, (4) malignant Papilloma.

Sarcoma of the thyroid is usually very

rapidly fatal. Treatment of this disease seems hopeless at the present time. Surgery offers practically nothing as the patient usually progresses to a fatal end within a few months, no matter what form of treatment is instituted.

There is little hope for the patient with carcinoma of the thyroid. The statistics of the Mayo Clinic show five per cent five year cures following removal and 30.6 per cent cures of shorter duration. The recurrence of the disease following operation is usually rapidly fatal. The proper treatment of the operable case is radical removal and installation of radium needles, possibly followed by x-ray.

Malignant adenoma are more amenable to treatment if seen and operated upon before the malignant process passes beyond the capsule of the adenoma. They cannot be differentiated from benign adenoma pre-operatively in the majority of cases, hence are usually diagnosed by the pathologist after removal. The adenoma may seem quite hard to palpation, but adenomas with recent hemorrhage into their capsules also have the same sensation on palpation. About thirty-eight per cent have five year cures following operation.

Malignant papilloma of the thyroid is a comparatively rare disease. It appears to be the least malignant type of new growths of the thyroid. There is a smaller number of recurrences and more five year cures reported in this small group of cases.

From the literature on the subject of malignancy of the thyroid, it seems that the patients best chance is from surgery in conjunction with radium and x-ray treatment. The exceptions to this are those cases with sarcoma of the thyroid. We found no cases of malignancy in this group.

END RESULTS

The final results of the 321 cases are:

- (1) Cured 242 or 75 per cent.
- (2) Taking thyroid extract 59 or 18 per cent clinically cured.
 - (3) Taking iodine 14 or 4.3 per cent.
- (4) Total good results (2 and 3) 301 or 96.88 per cent.
 - (5) Mortality 6 or 1.86 per cent.

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SOME PITFALLS IN THE PATHOLOGIC DIAGNOSIS OF CANCER*

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The field of malignant disease long ago became too large for any one person to encompass and because of the fact that the only proved treatments of cancer are radium, x-ray and surgery or a combination of these three, the burden of attempting more or less completely to govern the management of malignancy has fallen to the radiologist, the surgeon and the pathologist. The field of cancer surgery alone is unbelievably large and the same holds true for the other two branches, namely pathology and radiology. Because the lot of the pathologist is that of diagnosis, prognosis and judgment of irradiation response, it is imperative that he possess at least a working knowledge of the basic problems of surgery and irradiation in their relation to cancer. Moreover, he must have constant cooperation and help from the other two special branches to provide him with all possible clinical data before he can be expected to render a competent opinion on any questionable neoplasm. It is manifestly impossible to do more than touch upon a few of the highlights of the pathologist's problems. It seems preferable, therefore, to cite a few striking examples to illustrate certain clinical situations which may go unrecognized by the surgeon or the radiologist, who expect the pathologist to render an accurate, worth while opinion. Most of the examples will illustrate not only the importance of information gleaned from the clinical history, the roentgenologist's examination and the biopsy specimen but in some instances it will be shown that additional laboratory, therapeutic or clinical procedures must be resorted to in order to clear up some puzzling cases.

Mrs. G. entered the hospital because of a spontaneous pathological fracture of the humerus. A painful tumor mass was found in the region of the fracture. It was unhesitatingly pronounced a malignant tumor by the orthopedic surgeon and several consulting roentgenologists. A biopsy taken for substantiation, however, revealed a gumma. (Fig. 1). The same day the Wasserman was found to be four plus. Pictures of other bones revealed multiple

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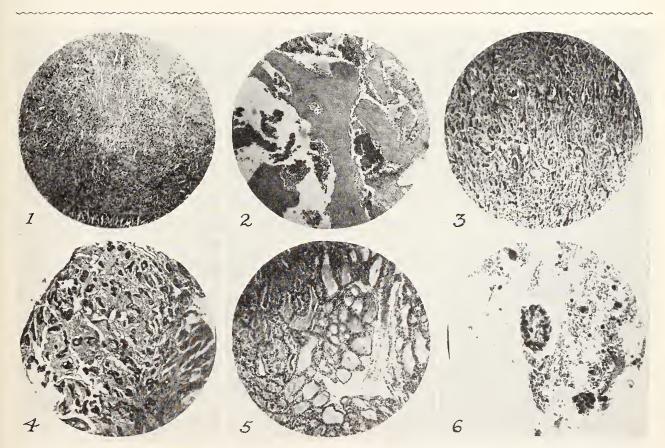
gummatous involvement and the patient recovered under anti-luetic treatment. In this case the biopsy was unnecessary. Had the multiple x-ray been made, had the history of many abortions been obtained and had the Wasserman reaction been known, a therapeutic test would have solved the problem.

Mercury, arsenic and the iodides are not the only therapeutic tests which we can employ in aiding the gross and microscopic decision as for example the following case: A diagnosis of osteomyelitis of Garre' was made on the femur of a five year old boy because of pain and swelling of the bone and fever. Under light irradiation this tumor underwent prompt regression and the diagnosis of Ewing's tumor might have been strongly suspected had we used the therapeutic test of irradiation in this case. Biopsy was taken twice before the true nature of the disease was disclosed. (Fig. 2).

In addition to the therapeutic tests previously mentioned, the pathologist must even secure

other laboratory data before he is in the proper position to give an accurate diagnosis. Thus, for example, in questionable lymph gland lesions an exhaustive blood study is often imperative. It is a well known fact that in the early stages of leukemia a biopsy from what may be considered a representative lymph gland may give no clue as to the diagnosis. Craver has recently shown that the biopsy may be of little or no assistance in making a diagnosis while the history and repeated physical examination will often reveal a much more accurate picture. Moreover, it has long been recognized that there is an apparent close interrelationship between lymphosarcoma, leukemia and Hodgkin's disease and it is not at all a rarity to have a case of lymphosarcoma terminate with the blood picture of leukemia.

It is often of utmost importance for the pathologist to inspect the gross lesion, so that he may be in a better position to select the area from which a biopsy should be taken.



Low power photomicrograph showing a typical

Fig. 1. Low power photomicrograph showing a typical gumma diagnosed from the roentgenogram.

Fig. 2. Low power photomicrograph from femur showing small nests of tumor cells in between bone spicules. This was the only area from many curettings showing a focus of Ewing's tumor.

Fig. 3. Low power photomicrograph showing typical adenocarcinoma of the prostate. This area no larger than a pin head was the only focus of malignancy in the entire gland.

Fig. 4. Low power photomicrograph showing a papillary broad based tumor of the trachea; from histology alone it was considered to be malignant.

Fig. 5. Low power photomicrograph of thyroid adenoma from the head of the left humerus; no primary lesion found in the thyroid gland.

Fig. 6. Low power photomicrograph of one group of malignant epithelial cells obtained by needle puncture from a fracture of femur. The primary tumor in the breast was not discovered until long afterward.

One who has had experience in the operating room, seeing many gross lesions of, let us say, the cervix uteri, may have a better idea than any one else of the most important area to be chosen for biopsy. Thus it has been of distinct advantage to me to have been present at the time of many Sturmdorf and cautery amputations of the uterine cervix and I have studied bundreds of cartwheel sections which illustrate varying gradations of erosion, pre-cancerous change and frank malignancy. It does happen that the pathologist receives non-cancerous biopsy sections from an area adjacent to a cancer or a large area of benign tumor may have a small solitary area of cancer hidden within it, as for example the case of Mr. A. This prostate removed by the suprapubic route was soft and uniformly elastic. No cancer was expected. Repeated cross sections adjacent to the prostatic urethra revealed one small granular indurated area about 3 mm in diameter. Sections were chosen from this area as well as throughout the prostatic tissue. The entire picture was that of benign adenomatous hypertrophy with the exception of one minute area of adenocarcinoma no larger than the head of a black pin. (Fig. 3). It is also of interest in considering malignancy of the prostate to cite another case. This man entered the hospital delirious. A diagnosis of encephalitis was made by a competent neurologist. The patient grew rapidly worse, lost consciousness and died. At the autopsy the brain was found to be riddled with pin head to pea sized carcinomatous nodules and the primary lesion was found to be a pin head sized cancer of the prostate. This illustration again accentuates the necessity for sectioning the right area.

We do not perhaps appreciate the frequency of non-symptom producing, miniature cancers of the prostate until we have sectioned a large number at necropsy where the patients have died from a wide variety of unrelated conditions. Thus, Arnold Rich in 292 post mortems of men over fifty years of age found forty-one miniature cancers or fourteen per cent, while Moore found that twenty-nine per cent of all men in the ninth decade had prostatic carcinoma.

It is my firm belief that the pathologist should be present at all prostoscopic, cystoscopic, bronchoscopic, esophagoscopic, and laryngoscopic, etc., examinations so that he may not only view the lesion in situ, make

suggestions for the proper area from which to select the biopsy but also for his own education. I have seen, not once but several times, benign rectal polyps with an area of malignancy on their summits. I have recently seen a tumor from the trachea which was histologically malignant, however, had its gross appearance and actual location been known it would have been considered as a benign lesion. (Fig. 4).

Recent studies by Clerf and Crawford have shown that it is impossible from histological examination alone to differentiate many of these tracheal lesions from cancer. If, on the other hand, the clinical and bronchoscopic features are known, their nature will be recognized.

A small piece of villus process removed from the summit of a papilloma of the bladder may be diagnosed histologically as benign while, if the pathologist had had the opportunity to observe a broad based papilloma, he could demand that a more representative section be secured and even then he sometimes can not be too certain of a diagnosis of benignancy. I have more than once seen histologically benign papillomas invading bladder muscle.

The employment of the biological tests may be of major importance in establishing the proper diagnosis and fixing the histogenesis of a given neoplasm. Thus, certain kidney and adrenal tumors may secrete epinepherin and the extracts of these neoplasms may be applied to the conjunctiva of the frog where the mydratic effect may be very striking, thus proving the histogenetic background of the tumor.

Metastatic lesions from small buried thyroid adenomas too minute to palpate may require a biological test or tests to prove their thyroid origin. Thus recently I observed a destructive medullary lesion on the head of the left humerus which histologically was typically of thyroid origin. (Fig. 5). No evidence of a primary tumor was present in the thyroid gland, yet with a desiccated extract from the tumor we were able to mature and cause the early metamorphosis of tadpoles and protect mice against the toxic action of aceto-nitril.

Lewis and Geschickter state that they are able to produce gynecomatsia by estrin injections and in one human case they claim to have produced breast adenofibroma by large injections of estrin. It is interesting in this respect that very active breast adenofibromas may be associated with the estrin producing granulosa cell tumors of the ovary and it has been alleged

in some cases where very striking epitheliad activity was seen in such a breast tumor that the diagnosis of granulosa cell tumor was actually made. I personally feel, however, that such a diagnosis is rarely warranted because I have seen many highly active adenofibromas without such associated ovarian tumors.

The Ascheim Zondek test may be used in determining deciduoma malignum, choriocarcinoma and hydatidiform mole, in which cases multiple dilutions of the urine will produce positive Friedman reactions because of the large amount of prolan excreated by patients possessing these tumors. However, we must not be led too far astray by giving too much credence to biological tests alone. I recently saw a case in which a very high titer of prolan was obtained with the result that a perforating uterine mole was diagnosed. When the history was carefully analyzed, however, such a diagnosis seemed unwarranted and laporatomy proved the case to be one of abdominal pregnancy which should have been diagnosed from the clinical findings alone. Moreover, I have recently studied two testicular tumors, both wildly malignant which showed an extremely low titer of urine prolan in the quantitative Ascheim Zondek test. These cases all serve to accentuate the importance of clinical, microscopic and laboratory data before venturing an unqualified opinion.

The malignant teratomas of the testicle, however, furnish us with an example of the valuable information which usually may be obtained from the employment of biological tests. Ordinarily the more malignant types secrete more prolan than the less malignant variety and even very early metastases will often be shown by the Ascheim Zondek test long before clinical manifestations appear, thus insuring the patient of the earliest possible treatment

Questionable lesions may be cleared up sometimes by needle puncture. Thus, for example a doctor's wife sixty-five years old had a spontaneous pathological fracture of the femur which was diagnosed as not being malignant both clinically and from the roentgenogram. The needle puncture showed one small nest of atypical epithelial cells. (Fig. 6). When this patient, a year later, came to necropsy multiple bony metastases were encountered and a small scirrhous carcinoma the size of a hazelnut was found in the left breast which was hardly pal-

pable externally. It is quite possible that a more careful physical examination might have revealed this primary tumor had the pathologist been compelled to go into the patient's clinical history even to the point of suggesting a more thorough examination of the breast. In addition to the needle puncture biopsy, the cytologic components of exudates may be analyzed by centrifugation and section of the centrifugate may be made. Often these fluids, however, must be very carefully studied before a definite diagnosis is made. I have seen aggregates of large endothelial cells from both pleural and acitic fluid diagnosed as carcinomatous cells when, if the pathologist had been in possession of all of the clinical data, he would have been highly suspicious of the cellular morphology. It should be recognized that the microscope is often no more infallible than other clinical or laboratory procedures.

The use of the resectoscope has been a blessing for the prostate sufferer but has been rather hard on the pathologist because of its desiccating action and I have on two occasions discovered cancer only after as many as seven different strips had been examined. In one case which was clinically malignant the histology was consistently that of benign hyperplasia and yet had I not been in possession of the clinical data so many different slides on this material might not have been made and the diagnosis would have been erroneous, which illustrates again the importance of a complete clinical picture.

CONCLUSIONS

In order for the pathologist to give the most reliable information on a given tumor, it is frequently imperative that he have access to all clinical, radiologic and laboratory data. Microscopic examination alone may be inadequate and it may be necessary to employ therapeutic, biologic or additional laboratory procedures to clear up some puzzling cases.

Case examples illustrating some of the pitfalls in cancer diagnosis are given and a brief discussion of how to avoid some of these diagnostic errors is given.

The interest of the public and profession alike are best served by a strict adherence to ethical publicity and recognition of the fact that the physician's sole and proper advertisement is that of a reputation for honest and efficient work, which spreads from one satisfied patient to another.—Bulletin of the Fulton County Medical Society, Atlanta, Ga.

NARCOLEPSY*

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and

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The object of this paper is merely that of giving a brief resumé of Gelineau's Syndrome or narcolepsy and to report four such cases.

This syndrome was first reported by Gelineau in 1880. Since that time over three hundred cases have come to light, the increase in number in recent years undoubtedly being due to the more general recognition of the condition.

CASE I

M. K., age twenty-seven years, farmer, in 1926 began sleeping in classes, and this became gradually worse until his naps occurred daily. They were irresistible, usually coming on in the early afternoon but excitement would precipitate an attack in the forenoon. During the winter of 1926, while snowballing, he made a lucky throw which was immediately followed by a general weakness causing him to fall to the ground. He got up in just a few seconds without assistance, and there was no loss of consciousness. From then on a joke or a finesse at bridge would cause a twitching of the face and draw the head around to either side with a short jerky movement. He could shoot a rabbit which was sitting, but if one should jump up unexpectedly, he could raise the gun to his shoulder but before he could shoot his knees would give out and he would gradually sink to the ground. His companions' laughter had such a profound effect upon him that he avoided company.

In 1928 he started three-eighths gr. of ephedrine sulphate three times a day. He noted very little relief, but his family did. After a few months he took the ephedrine only when going on a date, playing basketball, or participating in some other activity. He took a nap each noon for an hour, which decreased both the desire to sleep and the cataplexy.

His condition continued without particular change except for occasional remissions of three or four months duration until July, 1933. One day during the harvest of 1933, he laid down for his usual after dinner nap. In a

*Presented before the Ford County Medical Society in Dodge City on April 10, 1936. few minutes he began having difficulty in getting his breath; his heart beat rapidly and forcibly; he felt weak, dizzy and numb, he drooled at the mouth and was unable to move, but could grunt. This seemed to last for five minutes. When rolled on his back, he got up with an immediate disappearance of all symptoms. Another such spell came on two weeks later. He was then free from major attacks of cataplexy until August, 1934. This time the attack occurred upon going to bed. It was the same as before except he had a drenching sweat and the spell stopped in fifteen minutes. No major attacks have occurred since that date.

After he was started on one and one half gr. of thyroid daily in June, 1935, there was no change noted for approximately two weeks, then the cataplexy occurred less frequently and after another month the desire to sleep decreased. Now after nine months with one grain of thyroid daily, he takes no naps, requires no more sleep than the average person, and has been entirely free from cataplexy.

He has had the ordinary diseases of child-hood; influenza, appendectomy, and tonsillectomy. A gastric ulcer in 1927 with a recurrence in the spring of 1935 responded to medical treatment.

One brother has an arrested pulmonary tuberculosis; parents, three sisters and a brother are living and well.

Physical examination: Height, five feet seven inches; weight 195 pounds. General appearance is good and physical examination is normal. A diagnosis of narcolepsy concurred in by Dr. Clarence Van Epps, head of the department of neurology, University of Iowa.

CASE II

H. F., age twenty-five years, lawyer by profession. The patient had a normal active childhood and was capable of competing with his twin brother. He was an average student through school. In 1928 while in college, he began to have irresistible attacks of sleep. These attacks might come on at any time during the day but were more apt to occur following the noon meal and especially while studying. At first, attempts were made to fight off the attacks, but as no relief was obtained only after short nap, he would yield and then continue with his studies. The sleep was light in nature. The conversation taking place in the room registered, but answers were not given. Being aroused from the nap caused momentary anger.

He usually slept ten hours at night but the amount of sleep had no particular effect upon the number of attacks. These spells only came on when the room was quiet. His normal sleep was heavy and not disturbed by dreams.

Not long after the attacks of irresistible sleep began, he had spells of relaxation which would last for ten to thirty seconds. These occurred most frequently while eating. A joke would cause his hand raising a cup of coffee to gradually sink to the table, however, it was rare for the fluid to be spilled. A humorous scene in a movie would cause both hands to fall limply to his side. There was no jerking or other associated movements. He was always conscious of the attack. No other forms of unexpected excitement, save laughter, would precipitate an attack.

This sleepiness has continued to date, taking four to five naps a day. These are of such frequency that he has been unable to follow his profession as a lawyer. The attacks of relaxation are variable, tending to remissions.

The patient has also been troubled with polyuria having to void about nine times a day and one or two times at night. There is no associated polydipsia and polyhagia. There is no pruritis, nor has sugar ever been found in his urine.

He has had appendectomy, influenza, and the ordinary diseases of childhood. The father is a diabetic. Twin brother is in good health as are the other members of the family. The mother is dead.

Physical examination: The patient appears to be about thirty years of age, but in general good health. Height, five feet, seven inches; weigh 135 pounds. He wears glasses, and ear drums and hearing are normal. Teeth show a few leaky fillings, tonsils are small, and thyroid slightly palpable. The rest of physical examination is normal. Blood sugar was in normal limits.

One grain of thyroid extract was given daily for a week which had no apparent effect. The dose was increased to two grains daily for one week but he became very nervous, developed a tremor, and a quarrelsome disposition. The attacks of cataplexy became more frequent than ever before. Ephedrine sulphate three-eighths gr., b. i. d., was substituted. This immediately stopped the sleepy spells and began to decrease the attacks of cataplexy. After two weeks, this treatment began to lose its effect so that the

drug was taken t. i. d. and again there was good response. The polyuria dropped to three times a day with no nocturia. The general well being improved. He ran out of capsules; within forty-eight hours he had slipped back to his former condition. After getting the prescription refilled, he showed the same improvement as before, except that after a month, three-eighths grain b. i. d. seemed to be sufficient. He again stopped from the prescription and went to Hot Springs, Arkansas, for a course of baths. This made him feel better in general, but had no effect on the cataplexy which returned. After starting ephedrine he again obtained good results. Benzadrine sulphate, 10 mg.b.i.d., is now being used even more satisfactorily than ephedrine.

CASE III

E. B., student, age twenty-two years. At the beginning of the school year of 1929, the patient was apparently all right. As it became colder necessitating the closure of windows, he noticed an irresistible desire to sleep. The desired sleep could be forstalled by a stroll around the room, but it eventually overtook him. At the same time, he began to notice that any excitement would cause a twitching of his face and draw his head around to either side. The stimulus could be anything that appealed to the emotions. The cataplexy increased to the point of falling to the ground. This is now on the decline the patient not having fallen for three years. The sleepy spells are likewise decreasing.

His treatment has been more varied under the hands of his college physician, who has tried high and low protein, fat and carbohydrate diets along with bleeding. The patient feels that three-eighths gr. ephedrine sulphate twice daily is the most effective. Past history and family history are negative.

Physical examination: Height, five feet, seven inches; weight 156 pounds. Strong healthy appearance. General physical examination normal.

CASE IV

L. H., age nineteen years, student. At the age of fourteen years, the patient began to sleep in class. These attacks became more frequent; they were irresistible and would last about fifteen minutes. If he attempted to shake the attack off, he became very sluggish mentally, but would recover with a nap. His grades were above average. Emotional elevation would not

bring on the attacks of sleepiness, but quiet would.

One year later while fishing, the float suddenly went down, his knees weakened and he fell to the ground in a jerky manner. He was conscious of the attack, but could not talk. This spell lasted about fifteen minutes with complete recovery save for a feeling of weakness. The cataplexy increased in frequency occurring with any unusual or unexpected excitement. At times it would assume a different form, which consisted of the tongue curling down over the teeth behind the lip and pushing the lip down and out. This type was more apt to occur following laughter.

His first treatment was a reduction diet which did seem to help but it was not followed for any length of time. Ephedrine sulphate three-eighths gr. twice daily, did not seem to be of any value. He was then put on one and one-half gr. of thyroid daily, his cataplexy occurred less frequently, and within ten days his sleepiness gradually decreased but much more slowly. After several months the thyroid was stopped and his symptoms reappeared in three weeks. Since this treatment was resumed his cataplexy has stopped and his sleepiness is leaving, but is still bothersome. He takes several naps a day.

Physical examination: Height, five feet eight inches; weight, 183 pounds. General physical examination normal. The lateral x-ray of the skull was negative excepting the sella tursica was small. The sugar tolerance curve was flat. Blood calcium 11.5 mgm. and blood Wassermann was negative. The basal metabolism rate was minus nine. The diagnosis in this case concurred in by Dr. D. V. Conwell, Halstead Clinic, Halstead, Kansas.

The history of the first case was written somewhat more fully than the others, because it is severe and illustrates the syndrome practically in its entirety.

The etiology has not been determined. Some cases seem to occur in persons with a low grade hypothyroidism, while a few have an increased basal metabolic rate. Some cases seem to follow infections as encephalitis, or influenza; others date back to a head injury. An endocrine disturbance is often suspected, because fifty-two per cent of cases develop before the twenty-first year of life and many date back to puberty.

Max Levin states that nothing strikingly abnormal pathologically has been noted. The

urine analysis, blood counts, blood sugars, N. P. N., blood chlorides, calcium and phosphorus are all within normal limits, as are uric acid and creatinine. The Wassermanns are negative.

The symptoms are of two kinds. The one usually most troublesome is an irresistible desire to sleep, that may come on once or innumerable times daily. It may be of such a depth that the patient is aware of what is going on around him or so profound that it may be difficult to arouse him. If the patient is active it may last for only a few seconds, or if the patient is quiet, for several hours. The sleep usually comes on while the patient is sitting, but not necessarily so. He may be able to fight it off for a while, but eventually loses the battle. The patient resents being awakened when he feels the need of sleep. This sleep may come on spontaneously, or result from emotional elation. The patients frequently dream in their normal sleep and are more restless than is usual in normal sleep.

The second characteristic symptom is cataplexy. As it here occurs it may be defined as a clonic spasm which may or may not be associated with a general muscular relaxation. The attacks are usually precipitated by laughter or emotional elation. They vary from a complete loss of muscle power resulting in a fall to being limited to a certain muscle group as a jerking of the head around to the side. The patient is conscious of what takes place. The attacks usually last from a few seconds to one or two minutes, although they may last longer. There is a prompt recovery without ill results, save an occasional feeling of weakness.

The course of narcolepsy is generally considered as being chronic. At times the patients become sensative about their condition and withdraw from their friends and associates.

While it is possible to make many entries in the differential diagnosis the main conditions for consideration are petite mal and symptomatic narcolepsy. The latter condition is where the patient merely has the desire to sleep not associated with cataplexy. As pointed out by W. Hall in February 18, 1936, Journal of the American Medical Association, if the desire to sleep may occur alone, then why does not the cataplexy likewise occur alone. It is his impression that a great number of cases of narcolepsy are diagnosed petite mal.

The treatment of narcolepsy has been varied, including intrathecal injections of air, encepha-

lography. irradiation of the hypothalamic area and so on depending upon the suspected cause. In general ephedrine sulphate three-eighths gr. twice daily, has been most successful but at times this must be increased as the patient builds up a tolerance.

Thyroid has been used rather extensively because of the low B. M. R. associated with narcolepsy. It is given in doses of one to two grain a day depending upon the effect noted by the patient. It seems to work especially well in those patients, who have a tendency to be over weight.

Benzedrine is reported to have several advantages over ephedrine mainly that it is more lasting and gives a more uniform effect.

An afternoon nap is quite beneficial in preventing the sleepy spells. It is also necessary that these people find a type of work where the emotions are not aroused.

CONCLUSIONS

The etiology of narcolepsy has not been determined. The two characteristic symptoms are an irresistible sleep and cataplexy. The objective findings are normal. The laboratory findings fall within normal limits. The course tends to be chronic with remissions. The treatment is purely for the alleviation of symptoms.

A PRACTICAL DISCUSSION OF THE SILICOSIS PROBLEM*

O. A. SANDER. M.D.

Milwaukee, Wisconsin

Although dust disease of the lungs can be traced far back in history, it was not until the introduction of mechanical processes in mining and manufacture which greatly increased the amount of dust generated that it became a serious problem. Engineering methods of protecting those exposed did not keep pace with the increasing speed of production. Little thought was given to the early deaths, which were variously termed "consumption", "phthisis", etc., and which in reality were cases of silico-tuberculosis. The disease was thought to be inherent in the industry and was a part of the risk assumed by a worker when he entered such an industry. Not until the whole problem suddenly burst onto the public consciousness, through civil suits and newspaper publicity, did

*Presented before the twenty-third annual convention of the International Association of Industrial Accident Boards and Commissions in Topeka on September 21-24, 1936. many industrialists realize that something must be done.

That something had been done for many years in some industries in isolated sections was a surprise to many. For instance, one industrialist was found only within the past two years who was surprised to learn that sandblasting could be done much more safely and actually more economically in an exhausted booth rather than right out in the open at one end of his foundry. One cutlery manufacturer who had always insisted that only sandstone grinding wheels could turn out the quality knives he had always made, finds within the past year that they can be replaced with harder artificial abrasive wheels with no loss in the quality of his product. He is still more surprised to learn that the change is lowering his cost of production because he now is required to buy only a third as many wheels as he formerly did. No end of such surprises might be cited to show that engineering control is catching up with the problem provided its benefits can be sold to those who must face it.

Because lung changes due to silica dust inhalation are so slow and insidious in their development, many dusty trade employers have been lulled into the belief that the hazard does not exist in their establishments and have consequently disregarded the engineering suggestions which would reduce the hazards. Sooner or later, however, one of their old employees breaks down with "lung trouble", which throws the entire personnel of the plant into a frenzy of fear. The problem then is an acute one for which the executive staff is unprepared. How much better it would have been to have established a sane program of control earlier.

Such a practical program in any dusty trade is a combination of engineering and medical control. Neither is adequate without the other. Both are necessary. A discussion of the engineering control must be left to our engineering friends, who, by the way, are doing an excellent job. They have devised methods for prevention of dust dissemination for almost every known dusty process. It appears to be the work of the medical control to point out the need of applying those methods to this or that hazard.

Up to a few years ago only isolated surveys had been made in several of our dustier industries, largely to determine the extent of the

hazard presented by each. Best known of these investigations have been carried on by two of our governmental agencies—the United States Public Health Service and the United States Bureau of Mines—and by the Metropolitan Life Insurance Company as studies of the granite, cement, foundry and various mining industries. When attempts were made to correlate the findings of each regarding safe limits of dustiness, it was found that such correlations were not possible. Factors other than the concentration of silica dust alone seem to play a part in the rapidity of the development of silicosis. Just what these factors are and how much of a part they play remain to be definitely determined. More prolonged studies and observations are necessary in each dusty trade. Each must establish not only its safe limits of dustiness but also its own engineering and medical control measures and its own data regarding prognosis.

Such a prolonged study is now in progress in the state of Wisconsin; in fact, has been for almost four years. It is a very practical program which combines control methods of elimination of the dust with initial and periodic examinations of those exposed. The majority of the dusty trades in the state are included in this survey, foundry workers being by far the largest group. The entire group now totals over 15,000 workers who have been examined at least once, half of whom also having had follow-up examinations. It is the authors privilege to be conducting this extensive study with the cooperation of the many physicians throughout the state who are making the examinations for their local industries and sending us the chest x-ray films and examination reports for interpretation. Somewhat over half of the total number are from the Milwaukee area and are under the author's personal observation. The project began in 1932 when a large group of metal trades employers decided that a medical-control setup was necessary. With one of the large insurance carriers in our state pointing the way, the stone trade and numerous others with a silicosis hazard soon joined the survey. Others who are cooperating are the workers themselves, the employers who are paying for the examinations on a perexamination basis, and the various insurance companies who carry the compensation insurance which in Wisconsin covers silicosis.

In spite of the fact that the individual em-

ployers assume the cost of the examinations, the medical records remain strictly confidential and the private property of the examining physician. No information is given the employer which is not given to the examined employee at the same time. This procedure obviates the dangers of any injustices being done and is recommended. It has met the objections which are usually raised against employer examinations of employees and has been satisfactory to all concerned.

In the early part of this work, all employees exposed to dust in a plant, stone cutting shop, or quarry were examined. These findings were correlated and the worst hazards were in this way pointed out to the engineers who were charged with the work of reducing the hazards. Standard dust counts are used as a check on the effectiveness of the engineering measures. No old employees are discharged from their jobs except those that are found to have an active tuberculosis. These actively infected cases are urged to enter a sanatorium for treatment and isolation, and those in whom silicosis is part of the picture are compensated. Cases of simple silicosis that obviously require a markedly decreased dust exposure in the future are given the necessary protection by attempts to eliminate the dust to which they are exposed. If this is not possible to a sufficient degree, they are either given an approved respirator or are shifted to other work until such time as their own jobs can be made safe. Cases that are found to have an inactive lung infection which may reactivate are similarly protected from exposure to excessive dust concentrations. This latter group will be discussed at greater length later.

The frequency of re-examinations is dependent on the findings in each case at the first examination. Those who have worked for many years in a dusty trade and have not developed a recognizable degree of silicosis or whose lungs show no evidence of infection are not examined as frequently as are the others. An interval of two or three years between their examinations is found to be perfectly safe. Those with simple silicosis are examined annually while the inactive infection cases receive either annual or more frequent check-ups depending on the extent of the infected lesions.

At each examination the individual as a whole is studied, to include a complete physical examination as well as a postero-anterior ro-

entgenogram of the chest. The condition of the heart and blood vessels in an individual engaged in physical work is the prime factor in his ability to carry on. The condition of his lungs is of secondary importance—unless he has active lung infection. Of what tremendous value a good myocardium and soft blood vessels are in an advanced case of silicosis is not generally considered. One sees many such cases that continue at their work year after year without undue extra effort. On the other hand, others with less silicosis become short of breath on only mild exertion because of a poor myocardium or sclerotic coronary blood vessels. Determination of the condition of the cardiovascular system is of such importance that the addition of an electro-cardiogram is now being considered as part of the routine examination. Further work is very necessary in this direction.

In any routine examination program the question of individual predisposition or susceptibility always arises. Just what types of defects should bar a man from dusty work? Obviously, all will agree that the man with active pulmonary tuberculosis should be kept away from dust exposure, as well as out of any kind of work until his tuberculosis becomes healed. Not quite so obvious to many is the fact that arrested cases of tuberculosis, i. e., those as yet not thoroughly healed, are inviting reactivation of their infection by inhaling silica dust. When a doubt exists as to whether or not the infection is thoroughly healed, the safest side on which to err is to assume that the completely healed stage has not been reached. In fact, recent pathological evidence casts doubt that such parenchymal tuberculous lesions are ever thoroughly and effectively healed before the age of 50. This applies for non-silicotics as well as for silicotics.

It is these not-well-headed infections which later become the active silico-tuberculosis cases as more and more silica accumulates in the lungs. They are then erroneously referred to as "tuberculosis super-imposed on silicosis", whereas our observations suggest that the great majority were infected early in life, the accumulating silica preventing the healing of the infection. During the course of this survey fully 25 such apparently inactive silico-tuberculosis cases have been seen to break down with an active and open infection. However, only three cases have come to light in whom tuberculosis developed after the age of 30 in lungs which appeared to be uninfected at their first exami-

nation. One of these had no diagnosable silicosis while the other two had a moderately advanced degree which had developed as a result of massive exposures to silica dust. The fact that not one of the hundreds of cases of long-standing simple silicosis under observation has become infected may eventually be shown to have considerable significance. It suggests that the silicotic lung which results from prolonged inhalation of minimal to moderate dosages of silica may be no more susceptible to tuberculosis than is the non-silicotic lung.

Therefore, the one rigid rule in this survey is to routinely prevent from entering a dusty trade all applicants who have a not-thoroughly healed tuberculosis, whether or not they have silicosis. Old employees in a surveyed plant who show such infection, with or without silicosis, are given the utmost consideration as far as the reduction of their dust exposure is concerned. If their old jobs cannot be made sufficiently safe, they are shifted to definitely non-dusty work. It is hoped that this rigid protection of this group will prevent many active and progressive cases of silico-tuberculosis. Older persons, on the other hand, with obviously well healed and calcified tuberculous scars are permitted employment just as if their lungs were entirely clear, provided, of course, that they do not have an associated excessive amount of silicosis.

Of those with uncomplicated silicosis, only the advanced cases are barred from reentering a dusty trade. Most early silicosis cases are permitted employment at jobs where the dust hazard is under control. This is especially the rule with older persons who have been exposed to dust for many years and have acquired no more than an early silicosis. They are considered far better risks for further moderate dust exposure than are younger persons who have never been exposed to industrial dust.

When this fact becomes generally understood and practiced by dusty trade employers, the fear that workers have had of submitting to an examination will be largely removed. Labor will cooperate with such a program, as it has in our survey, when the workers realize that minor lung defects such as early silicosis, small and well healed infection scars, etc., will not bar them from further employment in their chosen occupations. As an example, we know of one employer who refused to accept for work in his foundry any applicants who

did not have perfectly normal lungs in every way. Even persons whose chest roentgenogram showed only a small diaphragmatic adhesion were rejected. As a result he was required to examine seven men for every one he employed. This soon became quite costly and besides caused a disturbance among his regular employees. He has since become convinced that such rigid weeding out was entirely unnecessary from a medical standpoint and has joined the survey project.

One of the main reasons why employers have feared to accept workers who already had a diagnosable degree of silicosis acquired in plants other than their own was because of the disability which had always been alleged to cases of simple silicosis. Until a few years ago, it had been generally believed that by the time silicosis was diagnosable on a chest x-ray film, it was already causing some impairment in the proper function of the lungs. Such estimates as twenty-five to fifty per cent disability were attached to early nodular fibrosis cases. These estimates in most cases were based on vital capacity readings, which are known to be most unreliable unless the subject is cooperating to the fullest extent. As a result, many of these early cases received compensation awards which totaled as much as \$2,000 in some cases. Quite naturally employers feared to employ workers who already had that much accumulated liability which was acquired elsewhere.

In the past few years, however, opinions on the disability with simple silicosis have changed considerably. As one observes these individuals year after year, he becomes impressed with the total absence of complaints among those with even a moderately well developed silicosis. Those with a good cardio-vascular system have no more shortness of breath on exertion than do the non-silicotics. Recent physiological studies at the University of Rochester bear this out. They find no diminished capacity for work until the residual air of the lungs has increased to about forty per cent of the total capacity. (In the normal lung, the residual air constitutes about twenty per cent of the total capacity.) In other words, the residual air must be about twice as much as normal before any conscious dyspnea occurs. Only in advanced cases of silicosis or in cases of emphysema with or without silicosis do they find the residual air increased to this degree. In early or moderately well developed silicosis cases without emphysema, little or no rise in the residual air content is found. In other words, it is emphysema which is the chief factor in a decreased function of the lungs. Since a secondary or compensatory emphysema does not develop in most cases until lung fibrosis becomes massive, it is reasonable from a physiological standpoint to conclude that impaired function of the lungs does not occur until the lung fibrosis becomes extensive. In our survey we have proceeded on this basis. If we are wrong, the employers for whom we are making examinations have acquired many employees who may prove costly to them in the future. We are more and more convinced, however, that we are right in this belief and shall continue to permit employment of the simple silicotics.

The progressiveness of silicosis has always been emphasized as one of its prime characteristics. In almost four years of observation, not one case of visible progression has come to light. We are not concluding as a result of this short period of study, however, that no progression is occurring. Within the next ten years we may expect to see some cases develop a visible nodulation which was not present earlier. We feel, however, that such cases will be relatively few because of the continued reduction of the dust concentrations in the industries we have under observation. Our impressions on the progressive nature of silicosis are these: That in the uninfected lung the fibrotic changes occurring with moderate silica exposures are extremely slow; so slow, in fact, that the majority so exposed could not live long enough natural lives to develop a massive lung fibrosis. With massive silica dosages, however, progressive fibrotic changes are much more rapid and it is this group that will show progression of the fibrosis even after silica inhalation is stopped. How long and how far such progression will proceed before an end stage is reached is problematical and remains to be definitely determined. We are observing several such advanced cases which we believe are uninfected-men who were sandblasters in the days before the modern air helmet was used. None have shown visible changes in over three years. What lung changes will occur, what percentage will become infected, and how soon the fibrosis will be seen to progress in those who are still uninfected, remains to be seen. It is believed that this group will follow the classical picture

of silicosis in that the majority will die of some complicating lung infection.

Fortunately this group which had massive silica exposures is extremely small as compared to the large numbers of workers who were exposed to minimal or moderate degrees of industrial dust. Out of the frequently quoted group of 500,000 dusty trade workers in the United States, that only a small percentage has been dangerously exposed is suggested by our survey. That a good prognosis can be offered the large majority is the feeling which is becoming more and more certain, proof of which will come when sufficiently large numbers have been observed over a somewhat longer period of time.

Since no statistical summary of the findings in our project has as yet been attempted—and probably will not be until a rather large group has been observed for at least five years—no definite statistics could be quoted in this paper. Any conclusions and deductions which have been made are still based on our daily observations of these dusty trade workers and the impressions derived therefrom.

It should be stated that the nomenclature which we use in our silicosis classifications is the one which was suggested by a special committee composed of Drs. Pancoast, Pendergrass, Riddell, Lanza, McConnell, Sayers, Sampson, and Gardner. It was published as a reprint of the Public Health Reports, Vol. 50, No. 31, August 2, 1935, and is entitled "Roentgenological Appearances in Silicosis and the Underlying Pathological Lesions". Instead of the old "first, second and third stages" which never were very satisfactory, it has simplified the classification by using only two groups, i.e., "Simple Silicosis" and "Silicosis with Infection". In the "simple silicosis" group are included all degrees of nodular fibrosis, all prenodular cases falling under the "Healthy Lung" classification. In the "silicosis with infection" group are included all degrees and types of tuberculosis, whether active, inactive or well healed. Because of its simplicity and completeness, this classification is recommended for adoption generally by those engaged in this work. Only by the use of a uniform nomenclature will it be possible to compare and correlate the findings of the numerous silicosis surveys now in progress in the country.

While many phases of this large subject have not been touched upon at all, the aims to be attained in a practical medical control program have been discussed. They may be summarized as follows:

- 1. Discovery of the dust hazards as a result of finding the cases, in order to hasten the eradication of these hazards.
- 2. Discovery and isolation of all active and open cases of tuberculosis, removing them as sources of contact with other employees, which especially protects the younger workers who are susceptible to contact infection.
- 3. Discovery of infected lung cases in which the tuberculosis is not active nor well healed and offering them special protection against excessive dust inhalation.
- 4. Periodic examination of the latter group at frequent intervals so as to discover any reaction of their tuberculosis before they have been active too long, again so as to protect especially the younger employees. Such early discovery of a reactivation also offers the infected individual a better chance for cure of his tuberculosis.
- 5. Discovery of the simple silicosis cases to give them added protection from further excessive dust exposure.
- 6. Periodic examination of the latter group at yearly intervals to determine if their added protection is adequate by noting whether or not the fibrosis is increasing; also to determine whether or not they are becoming infected.
- 7. Periodic examinations of all employees exposed to dust to establish data for prognosis, to give added protection to those who develop silicosis during the course of the survey.
- 8. Periodic examinations of all employees to reassure them that they are not developing "bad lungs", as they term it. Since the recent extensive newspaper publicity on silicosis, the silicosis phobia is much more widespread than is generally realized. Examinations afford an excellent opportunity for education of those exposed to dust to allay their fears. This in turn results in more satisfied and loyal workers because they appreciate what their employer is doing to protect them.

Finally, it is the firm belief of those of us who are engaged in this work that with such a program of medical control along with the necessary engineering control, any dusty trade, no matter how hazardous it had been in the past, should be able to solve its silicosis problem within a relatively few years. The tuberculosis rate in any dusty trade, with such control, should drop below the incidence in the community as a whole. Industrial tuberculosis will then have become an extinct disease.

PRESIDENT'S PAGE

To All Members of The Kansas Medical Society:

Undoubtedly the foremost interest of organized medicine in Kansas during the next several weeks is legislation. We have an excellent chance to pass a Basic Science Law which, as all physicians know, would provide much needed protection for the people of Kansas.

Various bulletins outlining suggested procedure in this regard have been forwarded to the official representatives, and the presidents and secretaries of the county medical societies. It is hoped that each county has or will accomplish its part of the program necessary to convince the legislature of the worth of this measure.

Likewise, a bulletin was forwarded to every member on February 10 which outlined another very valuable procedure toward this end. A request is made for each member to read this carefully and to attempt to accomplish his part therein as best he can.

The Committee on Public Policy deserves a great deal of commendation for the excellent efforts it has devoted toward the passage of a Basic Science Law in Kansas. It is our sincere belief that their efforts will be successful if each member in every county accomplishes fully his part of the program.

H. L. Snyder, M.D., President.

EDITORIAL

BOARD OF ADMINISTRATION

The Society was particularly glad to learn of the appointment by Governor Walter Huxman of Dr. Leo V. Turgeon, Wilson, for a four-year term and the reappointment of Dr. James Scott for a temporary term on the Board of Administration.

Since this Board has under its direction the state hospitals, the State Sanatorium for Tuberculosis at Norton, and several similar institutions and since its work is largely medical in scope, it is believed that medical representation on the Board can be of material assistance in rendering efficient and economic service to the state.

Governor Huxman's insight and understanding of the needs of this board are greatly appreciated by Kansas medicine.

THE ANNUAL MEETING

The annual meeting of The Kansas Medical Society will be held in Topeka on May 3, 4, 5, and 6, 1937. As a preliminary announcement, the program committee has issued the following statement:

The program for the morning meetings is to be divided into sectional meetings, so that any doctor, regardless of interest, should be able to find something to his liking. At noon, there are going to be round table luncheons, anticipating the open expression of ideas of all present, and not having a formal address. Each afternoon there will be three general sessions, and the topics to be discussed are those which should be of interest to both general practitioners and specialists.

Several well known men including Dr. Elliott Joslin of Boston, Dr. Russell Haden of Cleveland, Dr. C. F. Dixon of Rochester, Dr. Meyer Wiener of St. Louis, and Dr. Philip C. Jeans of Iowa City

are going to present papers at this meeting.

It is the desire of the committee to prepare such a varied and interesting program that the members of The Kansas Medical Society will plan to come to Topeka and remain throughout the entire meeting.

GEORGE T. McDERMOTT

Every Kansas physician was saddened to learn of the untimely death of Judge George T. McDermott in Winfield on January 19.

Judge McDermott participated in many decisions pertaining to the practice of medicine during his life as a lawyer and a judge. His sound, scientific and practical opinions in these matters have been of unusual assistance to the public and the profession and they will long stand as a monument to his memory among medical men.

Judge McDermott had among his friends many members of the Kansas medical profession and his absence will be sadly missed.

ROSENWALD FUND

The following release published by the Julius Rosenwald Fund under date of January 23 is of interest to the medical profession. The Rosenwald Fund has been particularly active during the past five years in research on the question of socialized medicine:

"The Julius Rosenwald Fund has made a grant of \$165,000 over a five-year period, to the Committee on Research in Medical Economics, it was announced yesterday by Edwin R. Embree, president of the Fund. This committee has recently been incorporated in New York, with Michael M. Davis as chairman, the other members being Robert E. Chaddock, Professor of Statistics, Columbia University; Henry S. Dennison, President, Dennison Manufacturing Company, Framingham, Massachusetts; Walton H. Hamilton, Professor of Law, Yale University and Difference of the Company of the Statistics of the Company of the Company

rector, Bureau of Research, Social Security Board, Washington; Elvin S. Johnson, Director, New School for Social Research, New York; Paul U. Kellogg, Editor, The Survey Graphic, New York; Harry A. Millis, Professor of Economics, University of Chicago; Fred M. Stein, retired banker, New York.

The committee will have an advisory board, to be enlarged as required, the following physicians now being members: Samuel Bradbury, M.D., Philadelphia; Alfred E. Cohn, M.D., New York; Alice Hamilton, M.D., Washington; Ludwig Hektoen, M.D., Chicago; and Franklin C. McLean, M.D., Chicago.

This committee will conduct and assist studies in the economic and social aspects of medical care; will train personnel for this field; and, in cooperation with the medical profession and other agencies, will furnish information and consultation services in behalf of rendering medical care more widely available to the people at costs within their means. The committee will have headquarters in New York City.

Since 1928, Mr. Embree stated, the Julius Rosenwald Fund has been actively at work with the aim of reducing the costs of medical services and of making them more accessible to people of small incomes. Now the organized medical profession, hospitals, and many industrial and governmental agencies are engaged in practical experiments in different parts of the country, organizing medical care to reduce costs or developing methods of getting these costs into the family budget.

Hence there is now less need for the promotion of action than for the guidance of action through scientific and dispassionate studies. The Fund therefore welcomes the opportunity to make a grant of this kind to a committee of social scientists and business men, with a distinguished medical advisory board. With this grant, together with the grant of \$100,000

Association to promote voluntary hospital insurance, the trustees have terminated their department of medical services, believing that these two agencies will now carry forward vigorously the Fund's long-standing and successful work in this field'.

Michael M. Davis, who is Chairman and the active director of the new committee has been, since 1928, the director of the Fund's department of medical services. He has been associated for many years with work in medical economics and with hospitals and clinics in New York, Boston, and Chicago, is the author of a number of books and many articles, Chairman of the Council of the American Hospital Association, and active in numerous national public health and welfare agencies".

LABORATORY

Edited by J. L. Lattimore, M.D.

DETERMINATION OF PATERNITY WITH BLOOD TESTS

J. L. LATTIMORE, M.D.

Topeka, Kansas

There are certain limitations governing the determination of paternity of children. Obviously, this usually involves the question of who is the legal father. There is no known laboratory procedure that will prove that a certain man is the father of a certain child, but it may be determined in one out of three questionable cases that a given man is not the father of a given child. Fewer exclusions would result in actual practice, since many of the accused men are actually the fathers.

Correct identification must be made of the parties involved. Cases have been reported where blood of other individuals has been substituted for the accused. Either personal acquaintance, finger prints, photographs or signatures must be obtained, if testimony shall carry the proper weight.

Courts now recognize the scientific accuracy of blood groups. Among the medical profession, a fair degree of knowledge prevails pertaining to the Landsteiner classification, as this is in daily use in obtaining suitable donors for transfusion. The Landsteiner classification is almost universally used at present but to refresh the memory, the equivalents are given.

Landsteiner classification O A B AB Jansky classification I II III IV Moss classification IV II III I

By use of this determination, approximately one out of six questionable cases can be determined, with the use of M and N determination one out of six, which makes one out of three, when the two methods are used.

Blood groups are inherited according to the Mendelian law and all individuals belong to one of the groups or sub-groups. Bernstein's triple allemorph theory is definitely established and according to his theory the possible combinations are:

Parents	Children
O X O	O
O X A	O,A
O X B	O,B
A X A	O.A
A X B O,	A,B,AB
B X B	O,B
O X AB	. A,B
AXAB	A,B,AB
B X AB	A,B,AB
AB X AB	A,B,AB

Any variation from the above is impossible. Due to the fact that approximately forty-seven per cent of all people belong to group O and forty-three per cent belong to group A, these are the classes most often involved. In testing, it is better to have blood from all involved persons. However, in certain cases, the man and child will belong to the same group and it is useless to go further, using this test.

In 1927, Landsteiner and Levine discovered two other agglutinogens, M and N, entirely separate from the A and B. Following along the general lines of application, the test is carried out about the same, with some minor variations. The main variation is in the preparation of the reagents, which must be potent. Only one case has been reported in which no agglutinin for M could be determined and none are reported which did not contain N. Immunization of rabbits with human blood, ac-

cording to the original method of Landsteiner and Levine is the technic in developing M and N agglutinins. Blood of group O is used and weekly injections of freshly drawn, saline washed cells used for four to five weeks. For details of technic, the reader will refer to their article in The Journal of Immunology, volume 27, No. 5, November 1934.

Combinations possible are as follows:

Parents	Children
M X M	M
N X N	N
M X N	MN
M X MN	MN,M
N X MN	MN,N
MN X MN	MN,M,N

Keeping in mind that agglutinogens are in the cells and agglutinins are in the serum, Weiner's statement appears to be true: (1) "Agglutinogen M cannot appear in the blood of a child unless present in the blood of one or both parents; the same holds for agglutinogen N. (2) A type M parent cannot give rise to a type N child; and conversely, a type N parent cannot give rise to a type M child. This follows from the fact that a type M individual is of genotype MM and therefore can only produce germ cells bearing the gene M. Each child must therefore possess at least one M gene and cannot belong to genotype NN. Similar reasoning holds for the reverse combinations".

The agglutinogens A and B as well as those of M and N are distributed, independent of sex, neither does there appear to be any connection of A and B with those of M and N.

Suitable examination of the various agglutinogens and agglutinins can be made on blood after several days, if collected under sterile conditions and proper cell suspension made in approximately one per cent saline.

Now, no one will argue that there is too little published in the literature of medicine. No reader can survey all the printed matter, worthy and unworthy. Nevertheless, the physician must attempt some reading every day, if he would grow in professional statute. The good that we derive from occasional encounters with sound ideas which are new to us, far outweighs in any balance frequent meetings with unsound ones.—R. K. Updegraff, Jr., M.D., Bulletin of Cleve. Acad. of Med., 20:10, Dec., 1936.

The future that lies before medicine is in individual health protection.—Charles Gordon Heyd, M.D.

TUBERCULOSIS ABSTRACTS

A review for physicians prepared monthly by the National Tuberculosis Association and published through the co-operation of the Kansas Tuberculosis and Health Association and The Kansas Medical Society.

CARBON DUST AND TUBERCULOSIS*

Tuberculosis is comparatively uncommon in workers exposed to dusts of carbon, lime and marble while those who work in an atmosphere laden with silica particles are particularly susceptible to tuberculous infection. Coal dust is the only one to which is attributed the property of inhibiting the development of tuberculosis. Attention was called to the high resistance of coal miners to tuberculosis as early as 1862 and since then evidence has been presented that carbon particles in the lung do exert a protective influence. During recent years, however, several investigators have reported that coal miners die from tuberculosis with greater frequency than the average of the total population. And in a group of one hundred old and retired coal miners in Wales, tubercle bacilli were found in the sputum of six on the first examination.

It is probable that conditions under which modern miners work may explain the discrepancy between the older and more recent surveys. Formerly hand drills were used exclusively. In order to avoid the hard rock most of the drilling was done directly into the coal along the edge of the vein. The dust consisted of rather large particles which as a rule settled quickly. Thus the miner was exposed to almost pure carbon dust and, because the particles were large, symptoms of pneumonoconiosis did not appear before exposure of from twelve to fifteen years.

In the modern coal industry the pneumatic drill or "jackhammer" is used. The dust created by this instrument consists of fine particles which at times is blown back with great force into the face of the operator and some remains suspended in air for many hours. Inhalation of this fine, highly concentrated dust may result in severe respiratory impairment after an exposure of only three or four years.

The pneumatic drill has made it practicable to mine small veins of coal which under the old method were considered too insignificant and timeconsuming to remove. To reach these

*Abstracted from Anthraocosilicosis and Tuberculosis, Martin J. Sokoloff, in the American Review of Tuberculosis, November, 1936. small veins it is necessary to drill directly into rock and this increases the hazard to the present-day coal miner by adding to the coal dust a great amount of fine silica particles. Analysis of the dust of certain anthracite coal mines showed that at times concentration may be as high as one billion particles per cubic foot of air (average 124 million) and that certain of these dusts contain as much as thirty-one per cent of free silica. Uncomplicated anthracosis such as was common among miners of the old type has been replaced in the modern miner by fibrosis of the lung associated with silica deposits.

To determine the frequency of tuberculosis as a complication of anthracosilicosis, observations were made upon a group of anthracite coal miners institutionalized because of disabling chronic pulmonary disease. Only those patients who had remained under treatment for two months or more were included. The group consisted of 418 men varying in age from twenty-one to sixty-seven years and whose period of exposure to mine dust ranged from three to fifty years. The average age was about forty-three years and the average exposure period nineteen years. All of these men had used the "jackhammer" periodically. Surface mine workers were not included.

In forty-two of these patients the lesions resulted solely from the action of mine dust, in fifty-seven per cent evidence of co-existing tuberculosis was found and in the small remainder non-tuberculous pulmonary complications occurred. The age-incidence study showed that tuberculosis appears later in life among these mine workers than it does in the general population; almost half were between forty-one and fifty years of age while only eight per cent were in the twenty-one to thirty age group. The incidence of tuberculosis varied directly with the amount of dust present in the lung.

The type of tuberculosis which complicates anthracosilicosis differs materially from that which is usually seen. It does not extend progressively downward from the apical or subapical region, but is found scattered throughout the lungs among the silicotic nodules. The tuberculous lesion is usually of slow evolution, is always present in both lungs and consists mainly of caseous nodules varying in size from a split-pea to a walnut. Tendency towards cavitation is great, demonstrable cavities being found in forty-three per cent of the patients.

The excavations may attain tremendous size, sometimes occupying almost an entire lobe. They are often multiple and may occur anywhere in the lungs, but the larger ones are usually found in the upper lobes. Caseous pneumonia occurs as a terminal event in many instances. Extensive plastic changes in the pleura are nearly always associated. Effusion occurs infrequently.

The clinical picture of anthracosilicosis coexisting with tuberculosis may be either nontoxic or toxic. In the former type the patients present the usual symptoms of pneumonoconiosis, dyspnoea, cough, expectoration and chest pains with slight fever in a few instances. Impairment of general health is slight. These cases are usually considered simple anthracosilicosis until attention is called to the tuberculosis by the discovery of tubercle bacilli or by roentgen-ray evidence.

The second or toxic form is characterized by extensive cavitation, the clinical picture being that of rapidly progressing tuberculosis. In addition to the local symptoms, there is always severe constitutional disturbance as evidenced by fever, loss of weight, loss of appetite, weakness and profuse sweating. Fever is a predominant feature of this form. It is present throughout the entire course of the disease and is septic in type, the afternoon temperature reaching 103 or 104 degrees F. in the majority of patients. Repeated and profuse haemoptyses occur in many instances.

The diagnosis of uncomplicated anthracosilicosis presents no special problem but to determine whether or not tuberculosis coexists is very often a difficult task. The following points should be considered:

- 1. Discovery of tubercle bacilli in the sputum. However, extensive tuberculous disease may be present with consistently negative sputum, or occasionally the bacilli may be present in intermittent showers.
- 2. Serial roentgenographic studies (less valuable in advanced pneumonoconiosis).
 - 3. Marked constitutional disturbance.
- 4. Physical examination (not usually helpful).
 - 5. Frank haemoptysis.
- 6. Pleural effusion (absent in uncomplicated anthracosilicosis).
 - 7. Tuberculosis in other organs.

The prognosis depends mostly upon the pathological condition. The pulmonary changes which occur as a result of the inhalation

of dust are permanent and cannot be altered in any way by therapeutic measures. In many patients, however, lessening of the severity of local symptoms and improvement in general health may be obtained by a prolonged period of rest in a suitable environment. In advanced pneumonoconiosis, this improvement may be only temporary, as death often ensues as a result of acute intercurrent respiratory infections or of myocardial insufficiency. The addition of tuberculosis contributes immeasurably to the gravity of the prognosis. When this combination is present in the non-toxic form the patient may live for years in comparative comfort. In those in whom the toxic variety of combined anthracosilicosis and tuberculosis develops, a fatal termination may occur in a relatively short time.

It is difficult to determine the frequency with which tuberculosis coexists with anthracosilicosis in coal miners because data from death records is concerned chiefly with individuals treated at home and the detection of tuberculosis occurring coincidently with pneumonoconiosis may require prolonged observation, repeated analyses of the sputum and serial roentgenographic study.

MEDICAL ECONOMICS

Edited by O. W. Davidson, M.D. of the Medical Economics Committee

MAPLE TREE ECONOMICS

A young newly married small town physician.

A few cast away maple saplings given to a small neighbor boy.

A few years later this boy drove the doctor's buggy team, shoveled through snow drifts, and sat by to observe rural medical care.

Another few years the former chauffeur gave medical instruction to the physician's son.

A series of personal letters sent by economic editor, requested original items for this Section.

A special delivery letter, from the once small town physician, brought the first response. (Article printed in column.)

Appreciation is hereby expressed, to all who assist, by sending articles for this column.

All the maple saplings are now large trees.

Assistance from the profession, with economic articles, will make this column grow like maple saplings.

MEDITATIONS

Several counties have been doing good work in carrying on diphtheria immunization campaigns. "By their fruits ye shall know them". It was indeed refreshing to note only six new cases in a recent weekly morbidity report for the state. Scarlet fever and influenza were not nearly so modest.

In speaking of influenza, just how is a country doctor to know where to draw the line between reportable cases of influenza and the garden variety of "flu colds"?

I have been thinking, would it not pay to send the weekly bulletins and morbidity reports to all physicians in the state, instead of just a chosen few? I am one, at least, who would gladly pay subscription for the cost of such service.

I wonder how much good is really accomplished by the required annual health inspection of schools, especially when it is done by a Part-Time, Low Bidder, County Health Officer? By the way, why is there a P.T., L.B., C. H. O.? To save a few dollars of the counties' money,—forsooth? Certainly it does not produce proper health conditions!

When a school district votes several hundred dollars to build a cyclone cellar and then turns down an opportunity to secure sanitary toilets, at a nominal price, what is the answer? There is real need for missionary health work.

Well, here's hoping that the Legislature will give favorable consideration to the Basic Science Law and to Governor Huxman's idea about compulsory consolidation of the smaller district schools.

''W''.

MEDICAL STUDENT ETHICS AND ECONOMIC INSTRUCTION

Time.

The time is ripe for the medical profession to begin building from the bottom up, rather than from the top down.

Necessity.

Establishment of a chair in our medical schools for the teaching of Ethics, Medical Economics, and Organization.

Instructor.

The instructor should be a man who either has made, or is making, a financial success, in the practice of his profession. He should be active in the organization of the profession.

Legislation.

We are confronted daily with problems of increasing complexity. Present legislation dealing with the relief of the indigent and near-indigent has more or less of a direct bearing upon the profession's economic affairs. We have a great Public Health Program, much of it is excellent, some of it cock-eyed.

Embryo-Physicians.

The medical graduate goes forth today, scarcely acquainted with any of the problems, except the treatment of diseases. He has been taught very little, if at all, about the patient who "fetches" in the disease.

Corner Stone.

The Art, and it truly is an Art, of understanding the patient and his problems, has been left almost entirely to chance. This Art can truly be called the corner stone of economics.

Complications.

The embryo-physician must cope with associates who lack training for cooperation and coordination of their efforts. Even worse, he must combat, else join, the myriad uplift societies, that are fostered by vain, altruistic egotists, who propose to preserve world health, with plans for the solicitation and dispensing of free medical care.

Obligations.

The medical student should not absorb the idea that he owes no service to the unfortunate and ailing. His training should be such that he would realize when, where, and to whom, he is obligated by honor to render his services. He should know also, how, when, and where, to shake off these Uplifters and Mr. Fixits.

Virtues.

He should realize the virtuous demands for his services, far better than these Glory Hunting Uplifters. If he does not, may God pity him!

Obstacles.

The art of training medical students to effectively combat the cult problem is essential. Hobnobbing, log-rolling, back-slapping, and whispering committees have generated into nothing but failures. Mass intelligence being

what it is, we may rightfully expect cult problems. Sir William Osler said essentially this, "In matters pertaining to disease, credulity remains a fixed fact, uninfluenced by either civilization or education". His statement did not make this a fact. He most tritely called attention to an unchangeable truth.

Proposal.

Form an organization within the student body, patterned after the county medical society, which is the basic unit of the State and American Medical Associations. Make membership and attendance compulsory. Permit their duly elected delegates (non-assessed, non-voting) to be seated in the House of Delegates at the State and American Medical Association meetings. Take them young. Teach them from the beginning.

The problem is Ours.

"C.C.S."

Revised Statutes of Kansas—1923 Section 21-2440. Fees of Physicians.

It shall be unlawful for any physician or surgeon to pay or offer to pay to any other physician or surgeon or to any person in his behalf, either directly or indirectly, any fee, money, or thing of value of any kind in consideration of such other physician's or surgeon's bringing to him, or agreeing or promising to bring to him, for treatment, any patient, assisting to treat or operate upon any such patient so sent, or advising or agreeing, promising or proposing to advise any patient to consult him, or to be treated or operated upon by him, or assisting to treat or operate upon any patient so advised; and it shall be unlawful for any physician or surgeon who shall have sent or shall propose to send to another physician or surgeon any patient, or who shall have advised or promised or proposed to advise any patient or patients to go to or to consult such other physician or surgeon, to demand, collect or receive any fee, money or thing of value of any kind, either directly or indirectly therefor, or for assisting to treat or operate upon any patient so sent or advised: Provided, however, That it shall not be unlawful for such physicians or surgeons to pay or receive such fee, money or value where full disclosure as to the amount to be paid and received shall have been made to the patient or person liable for

the fees to be charged for the treatment of such patient before such patient or person shall have paid or agreed upon the amount of the fees to be paid by them. (L. 1915, ch. 240, § 1; May 22.)

Section 21-2441. Penalty for violating provisions of act.

Any person who shall violate any of the provisions of this act shall be deemed guilty of a misdemeanor and upon conviction shall be punished by a fine of not more than \$500 and by imprisonment in the county jail for not exceeding six months, or both, and such conviction shall operate as an annulment of the license of such convicted person to practice as a physician and surgeon in this state. (L. 1915, ch. 240, § 2; May 22.)

TIMELY BREVITIES

Radical? Why, you have no idea how radical we could be. To give you an inkling we will "shoot the works" in reply to those good friends who advocate the doctor's becoming an employee of the state under socialized medicine.

If and when socialized medicine arrives, the doctor should be allowed to organize and affiliate with labor organizations just as other public employes have done. (In Great Britain the state doctors already have joined with the British Federation of Labor.) Then the following demands must, of necessity, be granted:

- 1. An adequate salary. This should make provision for the many heavy expenses of medical practice. Furthermore, it should be sufficient, also, to induce young men and women to spend eight or more years of their lives in the study of medicine. To be otherwise would lower the standards, and the sick would suffer most.
- 2. An eight hour day. No doctor should be required to work more than eight hours a day—or more than thirty hours a week if a Thirty Hour Week Bill is enacted by Congress: (Newspaper accounts from Russia state that doctors there work but six hours daily.)
- 3. Compensation. The doctor should be protected under the industrial laws of the state so that any injury or disease he might contract while pursuing his occupation would be compensable. (Is this asking too much?)
- 4. Pension. The widows and orphans of doctors who die while in the employ of the state should be granted a pension.

- 5. Retirement. All doctors should retire at the age of sixty or sixty-five on one-half to three-quarter's pay, thus automatically making room for younger physicians. (This, of course, would be contingent on the success of the Townsend Plan.)
- 6. Sick leave. Fifteen days' sick leave with pay should be allowed each year.
- 7. Vacations. Vacations with pay should be granted yearly. (All work and no play makes the doctor a dull fellow!)
- 8. Postgraduate work. Courses should be given frequently in order that the doctor might keep abreast with the latest advances in medical science. This would be of advantage to the patient as well as the doctor.

Are these requests unreasonable? We think not, especially since all these are already granted public employees. However, should they be refused, then doctors should have the right to go on strike. Of course, we fully realize this is not in accord with the ethics of the profession as we now know them. But the precedent already has been set. (In January, 1935, two hundred doctors employed in the municipal hospitals of Havana, Cuba, stayed out on strike for five days and until several fellow physicians were reinstated after having been discharged by the new political party in power.) No doubt Hippocrates would turn over in his grave should this come to pass.

A. C. Hanson, M.D.,

The Bulletin of the Des Moines Academy of Medicine, January, 1937.

CONSTITUTION AND BY-LAWS

(Concluded in this Issue)

Chapter IX.—Defense Board.

Section 1. It shall be the duty of the members of the Defense Board, severally or collectively, to investigate all claims of malpractice made against members; to immediately take full charge of all cases which after investigation they decide to be proper cases for defense; to prosecute such defense to the end, and to pay all costs of such defense from funds of this Society within their control, but they shall not pay or obligate this Society to pay any court costs or judgment rendered against any member in the final determination of any case. The Defense Board shall be empowered to contract with agents or attorneys as it deems necessary, insofar as the amounts to be expended thereby are approved, or do not exceed the amount of the annual defense budget.

- Sec. 2. Defense assistance shall be available only to members of this Society. No physician shall be defended for any action unless he was a paid member of this Society and a resident of this state at the time when the alleged malpractice was committed.
- Sec. 3. It shall be the duty of any member of this Society threatened with a suit or suits for malpractice to immediately notify the president of the component society of which he is a member, who shall at once request the chairman of the Defense Board to forward a defense application blank for completion with names of witnesses and full facts of the case. On receipt of this blank, properly executed, the president of that component society shall immediately appoint a committee, of which he shall be the chairman, and they shall proceed to investigate the charge made against such member.
- Sec. 4. This local committee shall examine the defendant member and his witnesses, and if the committee shall agree that the case should be defended it shall so report to the chairman of the Defense Board. If this committee shall decide that it is not a case to be defended the defendant may appeal directly to the Defense Board which shall in all cases have the final decision as to whether or not a case is to be defended. The findings of these committees, if unfavorable, are to be communicated only to the member applying for defense assistance.

Sec. 5. It shall be the duty of the Defense Board not only to investigate and decide without unnecessary delay whether or not a suit is a proper case for defense, but also to keep in close touch with the member sued, through his local defense committee, so that any new developments affecting the status of the suit may be fully known and considered by all parties concerned. The member sued shall at any time prior to trial have the privilege of withdrawing his request for defense from the Defense Board.

Sec. 6. Disbursements for defense shall be annually estimated in advance by the Defense Board as based upon average expenses of the preceding two years. The computed amount shall then be included in the annual budget of the Executive Secretary for presentation to and approval by the House of Delegates. The sum approved shall be subject to defense expenditure by the Defense Board upon vouchers signed by the Treasurer and countersigned by the chairman of the Defense Board. In the event an insufficient sum is budgeted, the Treasurer shall be empowered to provide, upon a sufficient accounting, an extra sum not to exceed \$300.00, and if additional amounts are necessary authorization shall be secured therefor from the Council. Any surplus at the end of the fiscal year shall be considered in the defense budget for the succeeding year.

Chapter X.—Editorial Board.

Section 1. The chairman of the Editorial Board shall be the Editor of THE JOURNAL OF THE KANSAS MEDICAL SOCIETY, and shall direct the functions of this Board. The other members of the Editorial Board shall assist him in any way possible, and shall confer with him on matters of general policy.

Sec. 2. The Editorial Board shall edit and oversee the compilation, publication, distribution, and business arrangements of THE JOURNAL OF THE KANSAS MEDICAL SOCIETY. It shall have power, upon majority vote, to accept or reject any submitted or invited scientific or general material for publication in the JOURNAL. It shall, insofar as may be possible within its budget, have supervision over the style, size, appearance, and typography of the JOURNAL. It shall have

authority to appoint members for editorial assistance, receive subscriptions, establish rules for acceptance of advertising, make contracts within its budget, establish dates of publication, collect accounts, and otherwise carry on the business of publishing the JOURNAL.

Sec. 3. The Editorial Board may edit and oversee the compilation, publication, distribution and business arrangements for any other publications of this Society insofar as such are authorized and approved by the House of Delegates or the Council.

Sec. 4. The Executive Secretary shall be the business manager of the JOURNAL, and shall assist in the supervision of business and mechanical functions of the JOURNAL in any way desired by the Editorial Board. The assistants in his office may likewise assist to the extent approved by the Council.

Sec. 5. The Editorial Board, upon the advice and consent of the Council, may appoint members who live in various Councilor Districts to serve as associate editors of the JOURNAL. The duties of the associate editors shall be to assist the Editorial Board in securing material for publication in business functions, in forwarding suggestions for improvement of the JOURNAL, and in all other ways possible. A meeting of the Editorial Board and the associate editors shall be held each year at the annual session.

Sec. 6. While the Editorial Board shall endeavor to maintain the JOURNAL upon a self-supporting basis, any incidental expense not within its income may be anticipated and included in the annual budget of the Executive Secretary for presentation to and approval by the House of Delegates. In the event of a deficiency in JOURNAL funds, whether or not a budgeted amount has been approved, a complete financial report shall be submitted to the Council, and the Council shall be empowered to appropriate additional amounts from the funds of this Society to the extent that may be necessary.

Sec. 7. Funds of the JOURNAL and other publications shall be accounted in separate ledgers, and shall preferably be maintained in separate banking institutions. Expenditures may be made by authorization of the Editorial Board upon vouchers signed by the Treasurer and countersigned by the chairman of the Editorial Board. Surplus funds may be accrued at the end of the fiscal year to reserve accounts within limits established by the House of Delegates or the Council.

Chapter XI.—Committees.

Section 1. The standing committees of this Society shall be as follows:

Committee on Arrangements

Committee on Auxiliary

Committee on Control of Cancer

Committee on Credentials

Executive Committee of the Council

Committee on History

Committee on Hospital Survey

Committee on Maternal and Child Welfare.

Committee on Medical Economics

Committee on Medical Schools

Committee on Necrology

Committee on Public Health and Education

Committee on Public Policy

Committee on Scientific Work

Committee on Stormont Medical Library.

Sec. 2. It shall be the duty of the President, except as is otherwise provided in these By-Laws, and as soon as

possible after assuming the duties of his office to appoint a chairman and other members for each standing committee of this Society. He may also at any time appoint chairmen and members of temporary committees who shall serve during his year as President. All appointments shall be representative of the entire membership, and with due consideration of the geographical location of members to enable full and complete attendance at committee meetings with a minimum inconvenience on the part of the individual members. Committee membership and location of committee centers shall also be considered with reference to the special work of any particular committee. It should be the aim and purpose of committee work and committee appointments to equitably divide and increase the responsibility of the work of this Society among the individual members, thereby stimulating their personal efforts toward betterment of all conditions affecting physicians as individuals and this Society as a whole.

Sec. 3. Each committee shall submit a written annual report in duplicate to the Executive Secretary, addressed to the House of Delegates, not later than ten days before each annual session and shall submit such other reports as the House of Delegates or the Council may require.

Sec. 4. The Executive Secretary shall endeavor to attend all meetings of committeess, shall keep a record of their proceedings, shall assist in their secretarial requirements, and shall further their approved aims or activities in any way possible.

Sec. 5. No functions outside of those authorized by these By-Laws may be undertaken by any committees without approval by the President, the Council, or the House of Delegates. Expenditures by committees for activities or projects may be anticipated and included in the annual budget of the Executive Secretary for presentation to and approval of the House of Delegates. Other expenditures shall not be made, nor shall other obligations be incurred, without the consent and approval of the Council or its authorized representative. Statements for approved expenditures shall be certified by the chairman of the various committees, and forwarded to the Executive Secretary for payment.

Sec. 6. The Committee on Arrangements shall be appointed by the component society of the county in which the next annual session is to be held, and shall consist of as many sub-committees as may be desired. It shall be the duty of this committee to provide suitable accommodations for the meeting places of this Society, the Council, the House of Delegates, and their respective committees. It shall also have general charge of all the annual session arrangements in co-operation with the Committee on Scientific Work. Its chairman shall report an outline of the arrangements to the Executive Secretary for publication in the official annual session program, and shall make additional announcements about the session as occasion may require.

Sec. 7. The Committee on Auxiliary shall be composed of at least five members. It shall be the duty of this committee to cooperate with the Kansas Medical Auxiliary in furthering the ideals, activities, and projects of that organization, at least one member of this committee shall have served on the retiring committee.

Sec. 8. The Committee on Control of Cancer shall be composed of at least nine members. It shall be the duty of this committee to conduct all possible research on the subject of cancer, to disseminate information through its own efforts and through those of the Committee on Pub-

lic Health and Education to the public and the medical profession, and to recommend methods for control of this disease. At least six of these members, one of whom is the retiring chairman, shall have served on the retiring committee.

Sec. 9. The Committee on Credentials shall be composed of three members, one of whom shall be the Secretary. It shall be the duty of this committee to approve or reject credentials for admission or representation at meetings of this Society or the House of Delegates. It shall meet and be prepared to report at the first meeting of each House of Delegates, and shall serve as the sergeant-at-arms at all annual sessions.

Sec. 10. The Executive Committee of the Council shall be composed of the President, the President Elect, the Secretary and the Treasurer. This committee shall meet at the call of the President, and shall have authority to act in the interim between meetings of the Council upon all matters which would ordinarily require approval by the Council, which do not properly necessitate a special meeting of the Council, and which have not been delegated elsewhere by these By-Laws.

Sec. 11. The Committee on History shall be composed of at least three members whose appointments shall be for terms of three years each: Provided, that vacancies occasioned by death, resignation or removal may be filled by the President. It shall be the duty of this committee to collect, preserve and compile all available data concerning the history of this Society and the history of the medical profession in Kansas, and to make a report of their findings at each annual meeting of the House of Delegates.

Sec. 12. The Committee on Hospital Survey shall be composed of at least five members. It shall be the duty of this committee to make surveys of the hospitals in this state, and to cooperate in this and other ways with the American Medical Association committee of the same name. At least one member of this committee shall have served on the retiring committee.

Sec. 13. The Committee on Maternal and Child Welfare shall consist of at least five members. It shall be the duty of this committee to secure all available data on the subject of maternal and child welfare, to disseminate information thereon, and to assist in the improvement of conditions therein. At least two members of this committee shall have served on the retiring committee.

Sec. 14. The Committee on Medical Economics shall consist of at least five members. The duty of this committee shall be to investigate matters affecting the status of medical economics, both of this state and of the nation, and to advise the officers and the Council from time to time, and the House of Delegates annually, as to its findings and recommendations for means by which this Society as a whole, the component societies as units, and the members as individuals may employ to improve the economic status of the public and the medical profession. At least two members of this committee, one of whom is the retiring chairman, shall have served on the retiring committee.

Sec. 15. The Committee on Medical Schools shall be composed of at least five members. It shall be the duty of this committee to secure all available data concerning the activities, progress and needs of the medical schools of this state, and to make an annual report of the same to the House of Delegates. It shall also endeavor to establish and maintain a close relationship between the schools of medicine in this state and this Society, and shall remain

in close contact with other universities or colleges in the state which offer pre-medical or basic science courses. At least two members of this committee shall have served on the retiring committee.

Sec. 16. The Committee on Necrology shall be composed of at least three members. It shall be the duty of this committee to collect all available data concerning the members of this Society and other physicians of this state who die during each year, and to report this information at each annual meeting of the House of Delegates. At least one member of this committee shall have served on the retiring committee.

Sec. 17. The Committee on Public Health and Education shall consist of at least five members, who shall through the mediums of speakers' bureaus, newspapers, radio and other methods make material and information available to the public on all subjects for betterment of public health. At least two members of this committee shall have served on the retiring committee.

Sec. 18. The Committee on Public Policy shall consist of at least three members, and in addition the President Elect and the Secretary. Under the direction of the House of Delegates and Council it shall represent this Society in securing and enforcing legislation in the interest of public health, scientific medicine and the medical profession. It shall keep in touch with professional and public opinion, shall endeavor to shape legislation so as to secure the best results for the whole people, and shall strive to organize professional influence so as to promote the general good of the community in local, state and national affairs and elections. At least one member of this committee shall have served on the retiring committee.

Sec. 19. The Committee on Scientific Work shall consist of at least three members and the Secretary. It shall determine the character and scope of the scientific proceedings of this Society for each annual session, and subject to the approval of the Council, and thirty days previous to each annual session shall prepare a program for issuance by the Executive Secretary announcing the order in which papers, discussions and other business are to be presented. It shall also further other scientific activities of this Society.

Sec. 20. The Committee on Stormont Medical Library shall be composed of at least three members, one of whom shall be a resident of Topeka. It shall be the duty of this committee to formulate and recommend to the state librarian rules for the use and lists for the purchase of medical books, charts and magazines at the Stormont Medical Library, as accumulated funds may justify, in accordance with the provisions of Section 75-2525 and Section 75-2529 in the Revised Kansas Statutes. At least one member of this committee shall have served on the retiring committee.

Chapter XII.—Component Societies.

Section 1. All component societies now chartered and affiliated with this Society are hereby recognized as component units, and all component societies hereafter organized in this state which adopt principles of organization in accordance with this Constitution and By-Laws shall, on application and approval by the Council, receive a charter as component units of this Society.

Sec. 2. As rapidly as possible after the adoption of this Constitution and By-Laws a component society shall be organized in each county in the state in which no society exists: Provided, that no component society shall be chartered in any county offering less than five members.

Sec. 3. Upon the recommendation of the Council, the

House of Delegates shall have authority to revoke the charter of any component society whose actions are in conflict with the letter or spirit of this Constitution and By-Laws.

Sec. 4. Only one component society shall be chartered in any county. Where more than one county medical society exists in a particular county, friendly overtures and concessions shall be made with the aid of the Councilor in that district toward a consolidation into one organization. In the event of failure to unite, an appeal may be made to the Council which shall decide what action shall be taken.

Sec. 5. Each component society shall judge the qualifications of its own members, but as these societies are the only portals of entrance to this Society and to the American Medical Association, every reputable, ethical and legally registered physician who holds a degree of Doctor of Medicine from an accredited medical school shall be eligible to membership. Before a charter is issued to any component society full and ample notice and opportunity to become a member shall be given to every physician in that county who is eligible as herein provided.

Sec. 6. A member removing from one county to another may retain his membership in his original component society with the consent of that component society, but for obvious reasons transfer to the component society of his new residence is recommended. When such transfer is desired he shall make formal application to the component society of his new residence, giving full and complete information as is required upon an original application, together with a statement from the component society of which he is a member stating that he is a member in good standing, and recommending that he be accepted by the component society into whose jurisdiction he has moved. His application shall then be subject to the same examination and review by the local board of censors and vote as is required of new members. Upon acceptance or rejection, the secretary of the component society to which application has been made shall immediately notify the candidate, the secretary of the component society of present membership, and the Executive Secretary of this Society of its action. Acceptance as a member shall authorize immediate removal from the roll of the former component society, but rejection shall in no way affect his membership in the former component society.

Sec. 7. Any physician who may feel aggrieved by the action of the component society of his county in refusing him membership, or in suspending or expelling him, shall have the right to appeal to the Council whose decision shall be final as to whether or not the appellant shall hold membership in this Society.

Sec. 8. In hearings of appeals, the Council may admit oral or written evidence as in its judgment will best and most fairly present the facts, but in every case of appeal efforts for conciliation and compromise shall precede all hearings.

Sec. 9. A physician living on or near a county line may hold membership in the county most convenient for him to attend if permission is obtained from the component society in whose jurisdiction he resides and from the component society to which he desires to belong.

Sec. 10. No physician shall be admitted to membership in this Society, or in any of its component societies, who is a member of a state or component medical society of another state unless he intends by his application to

transfer his membership. Nor shall any physician be admitted to membership in this Society, or in any of its component societies, who resides in another state unless there are unusual circumstances which cause his membership to be advisable in this state, and unless consent is secured from the county medical society or state medical society of his residence.

Sec. 11. No physician may hold membership in two component societies at the same time, and no physician may be a member of a component society without becoming a member of this Society.

Sec. 12. Each component society shall have general direction of the affairs of the medical profession in that county, and its influence shall be constantly exerted for betterment of the scientific, moral and material condition of every physician in that county. Systematic efforts shall be made by each member, and by each component society as a whole, to increase membership until every qualified physician in every county is included.

Sec. 13. The secretary of each component society shall keep a roster showing the names of its members and the names of the non-affiliated registered doctors of medicine of that county, their addresses, colleges, dates of graduation, dates of license to practice in this state, and such other information as may be deemed necessary. In keeping this roster the secretary shall note any changes in the personnel of the profession by death or by removal to or from the county, and in making his annual report shall account for every physician who has lived in the county during the year.

Sec. 14. The secretary of each component society shall forward the assessment of that society, together with its roster of officers, members and list of non-affiliated physicians, to the Executive Secretary on or before the first day of February of each year.

Sec. 15. Any component society which fails to pay its assessment and make an annual report on or before the first day of February shall be held as suspended unless special permission is secured from the President, whereupon remittance of the assessment may be delayed not longer than April first of that year, and none of its members or delegates shall be permitted to participate in any business or proceedings of this Society, or the House of Delegates, until such requirements have been met. A member of any component society who is shown in an annual report to be in suspension for non-payment of dues shall be reinstated by said component society upon payment of his assessment during that year. If a member shall remain in arrears in payment of his dues beyond the following December 31st, he shall lose his membership and shall not be entitled to reinstatement except upon formal action of his component society and upon payment of all assessments in arrears: Provided, that any member upon showing just and sufficient cause which prohibits his active local practice, may cause the necessity for formal readmittance and payment of dues in arrears to be waived by securing a leave of absence, demit, or other permission for non-membership from his component society at the time he intends to discontinue payment of assessments, The Council may waive the necessity for payment of dues in arrears if it finds that unusual circumstances make such action advisable.

Sec. 16. Physicians residing in counties where no component county societies exist, and who hold membership in any district medical society or adjoining component society, independent or otherwise, whose principles are recognized by the Council as not incompatible with those

of this Society, may by virtue of such membership be accepted as members of this Society. Applicants for membership in this Society under this provision must have their credentials certified by the proper officials of the district or component society to which they belong and their state membership dues shall be paid by them through the secretary of that society.

Chapter XIII.—Rules of Order.

The deliberations of this Society shall be governed by parliamentary usage as contained in Robert's Rules of Order when not in conflict with this Constitution and By-Laws.

Chapter XIV.—Medical Ethics.

The Principles of Medical Ethics of the American Medical Association shall govern the conduct of members in their relations to each other and to the public.

Chapter XV.—Amendments.

These By-Laws may be amended at any annual session by a majority vote of all the delegates present at that session after the amendment has lain on the table for one day.

Resolution of Adoption.

Be it hereby resolved, that this revised Constitution and By-Laws shall be in full force and effect at the close of the meeting of its adoption, and that it shall supersede all prior constitutions, by-laws, and amendments of this Society.

Likewise, that the officers, Councilors, board members, and committee members who are holding offices for definite terms under the Constitution and By-Laws immediately preceding shall serve until the expiration of the term for which they were elected, and until their successors under this revised Constitution and By-Laws have been duly elected, qualified and installed.

Adopted this 11th day of May, 1936, at a meeting of the House of Delegates of The Kansas Medical Society in Kansas City, Kansas.

	Certified:
	President
(SEAL)	
	Secretary

"As the psychiatric viewpoint and training pervades medicine and the general hospitals; there will be an increased development of psychiatric care in the general hospitals and, therefore, there will tend to be a decentralization from state hospital care to local general hospitals. This may be one solution of the increased burden of state budgets. Furthermore, as physicians become better versed in the treatment of psychiatric problems in general practice, there may be a decreasing tendency to send psychiatric patients immediately to state hospitals and more of an inclination to care for them in their homes, under private or clinic medical supervision, public health nursing and social service care."—Dr. Clarence O. Cheney, in Mental Hygiene News, June, 1936.

The main hope of organized medicine lies in the integrity of the basic unit—the county medical society.—Journal of the Michigan State Medical Society.

NEWS NOTES

IMPORTANT

The Committee on Public Policy has requested that each member of the Society write and have his friends write their Senators and Representatives endorsing the Basic Science Law.

All letters should be forwarded prior to February 19.

It is desired that each member have at least five of his friends write to Senators and Representatives in this interest. The Basic Science Law pamphlet, of which each secretary or official representative has extra copies, may be used for explanatory purposes.

The above procedure if completely followed, will occasion a total of 9,000 letters endorsing the measure.

LEGISLATION

The following Basic Science Law was introduced in the House of Representatives by Mr. Harry Fisher of Bourbon County on February 4:

AN ACT defining the healing art, and providing the qualifications for persons seeking licenses to practice the healing art, and providing that the State Board of Education shall conduct certain examinations into the qualifications of such applicants, and the issue of certificates therefor, and providing rules and regulations for such examinations, and the payment and definition of fees thereof, and providing penalties for violation of this act.

Be it enacted by the Legislature of the State of Kansas:

Section 1. Nothing in this act shall be interpreted to apply to any person who is licensed to practice the healing art, or any branch thereof, in this state at the time this Act shall take effect; nor to dentists, pharmacists, optometrists, nurses, barbers. cosmeticians, or Christian Scientists who practice within the limits of their respective callings; nor to persons specifically permitted by law to practice without licenses and who practice within the limits of the privileges given to them; nor to the sale, manufacture, or advertising of equipment, drugs, medicines, household remedies, and chemicals in the usual course of business as distinguished from the practice of the healing art.

Sec. 2. No person, except as is specifically excepted herein, shall be permitted to take an examination for a license to practice the healing art or any branch thereof, or be granted any such license, unless he has presented to the board or officer empowered to issue such a license as the applicant seeks, a certificate of proficiency in anatomy, physiology, chemistry, bacteriology and pathology (hereinafter referred to as the basic sciences) issued by the State Board of Education (hereinafter referred to as the board).

Sec. 3. For the purposes of this act, the healing art includes any system, treatment, operation, diagnosis, prescription, or practice for the ascertainment,

cure, relief, palliation, adjustment, or correction of any human disease, ailment, deformity, injury or unhealthy or abnormal physical or mental condition.

Sec. 4. The fee for examination in the basic sciences shall be ten dollars. The fee for reexamination within any twelve-month period shall be five dollars, but the fee for reexamination after the expiration of twelve months shall be the same as the original fee. The fee for the issue of a certificate by authority of reciprocity, on the basis of qualifications as determined by the proper agency of some other state, territory, or the District of Columbia, shall be five dollars. All fees payable under this Act shall be paid to a person designated by the board at the time the applicant files his application. All fees received under this Act by the person designated by the board shall be at least once each month paid to the state treasurer. The state treasurer and state auditor shall credit ten per cent of all the fees remitted into the state treasury by virtue of this act to the general fund of the state and shall credit the remaining ninety per cent to a special fund known as the "basic science examination fees fund". Any amounts credited by the state treasurer and state auditor to the "basic science examination fees fund" shall be available to the State Board of Education to cover expenses incident to the provisions of this Act and the enforcement of this Act. The state auditor is hereby authorized and directed to draw his warrant upon the state treasurer upon properly verified vouchers for the above purposes, approved by the chairman of the Board of Education, such warrants to be redeemable from the "basic science examination fees fund".

Sec. 5. The State Board of Education shall conduct the examinations provided in this Act. The board shall conduct such examinations at least twice a year at such times and places as it deems advisable. The board is hereby empowered to obtain and employ professors, associate professors, or assistant professors from the science departments of accredited colleges and universities in the state to assist in preparing, conducting, and granting the basic science examinations required by this act: Provided, however, that no such assistant may be selected from the University of Kansas or its school of medicine, and that none shall be a member or practitioner of any healing profession. Such assistants shall receive ten dollars per diem and traveling expenses to be paid from the special basic science examination fee fund. The board shall be empowered to issue basic science certificates to applicants who have complied with the provisions of this Act, shall make such rules as it deems expedient to carry this Act into effect, and shall keep a record of all its proceedings which shall be prima facie evidence of all matters contained therein.

Sec. 6. Every applicant, except as hereinafter provided, shall be examined to determine his knowledge, ability, and skill in the basic sciences. The examinations shall be conducted in writing, but may be supplemented by oral examinations and by examinations in the laboratory, dissecting room, and dispensary. The examinations shall also be conducted by number without knowledge by the examiners in the grading of examinations as to the names, professions or schools of applicants. If the

applicant receives a credit of seventy-five per cent or more in each of the basic sciences, he shall be considered as having passed the examination. If the applicant receives less than seventy-five per cent in one subject and receives seventy-five per cent or more in each of the remaining subjects, he shall be allowed a reexamination at the examination next ensuing, on application and the payment of the prescribed fee, and he shall be required to be reexamined only in the subject in which he received a rating less than seventy-five per cent. If the applicant receives less than seventy-five per cent in more than one subject, he shall not be reexamined unless he presents proof, satisfactory to the board, of additional study in the basic sciences sufficient to justify reexamination.

Sec. 7. No basic science certificate shall be issued by the board unless the person applying for it submits evidence, satisfactory to the board, (1) that he is not less than twenty-one years old; (2) that he is a person of good moral character; (3) that before he began the study of the healing art he was graduated by a high school accredited by the State Board of Education of Kansas or a school of similar grade, or that he possesses educational qualifications equivalent to those required for graduation by such an accredited high school; and (4) that he has a comprehensive knowledge of the basic sciences as shown by his passing the examination given by the board, as this Act required. This shall not be construed to prevent the issue of certificates under the provisions of Section 8 of this Act.

Sec. 8. The board may in its discretion waive the examination required by section 7, when proof satisfactory to the board is submitted, showing (1) that the applicant has passed in another state an examination in the basic sciences before a board of examiners in the basic sciences; (2) that the requirements of that state are not less than those required by this Act as a condition precedent to the issue of a certificate; and (3) that the board of examiners in the basic sciences in that state grants like exemption from examination in the basic sciences to persons holding basic science certificates from the State Board of Education of Kansas.

Sec. 9. Any basic science certificate and any license to practice the healing art or any branch thereof, issued contrary to this Act, is void. Any licensing board which has issued a license on the basis of a void basic science certificate shall revoke or cancel that license. The procedure for such revocation or cancellation shall be in accordance with the provisions of the act under which such license was issued. The basic science certificate issued to any person by the State Board of Education shall be revoked automatically by the revocation of his license to practice the healing art or any branch thereof.

Sec. 10. Any person who practices the healing art or any branch thereof without having a basic science certificate from the board, except as is otherwise authorized by this Act: or any person who obtains or attempts to obtain a basic science certificate by false or fraudulent means, or who forges, counterfeits, or fraudulently alters any such certificate; or any person, except as otherwise autho-

rized by this act, who obtains or attempts to obtain a license to practice the healing art or any branch thereof, from any board or officer authorized to issue any such license, without presenting to said board or officer a valid basic science certificate issued to the applicant by the State Board of Education as in this Act required; or any person who knowingly issues or participates in the issuance of a license to practice the healing art or any branch thereof, (1) to any person, except as is otherwise authorized by this Act, who has not presented to the licensing Board a valid basic science certificate from the State Board of Education or (2) to any person who has presented to such licensing board a basic science certificate obtained from the State Board of Education by dishonesty or fraud, or by any forged or counterfeit certificate, shall be guilty of a misdemeanor and shall be fined not more than three hundred dollars or imprisoned not more than six months, or both such fine and imprisonment.

Sec. 11. Nothing in this Act shall be construed as repealing any statutory provision in force at the time of its passage with reference to the requirements governing the issue of licenses to practice the healing art or any branch thereof or as in any way lessening such requirements. But any board authorized to issue licenses to practice the healing art or any branch thereof may in its discretion either accept basic science certificates issued by the board in lieu of examining the certificates in such sciences or it may also examine such certificates in such sciences.

Sec. 12. This Act shall take effect and be in force from and after its publication in the official state paper.

It will be noted that the proposed law differs somewhat from the Act contained in the Basic Science Pamphlet but that it nevertheless contains the two qualifications which the medical profession believes to be essential, (1) that every practitioner of the healing art shall take a uniform examination in anatomy, physiology, chemistry, bacteriology and pathology; (2) given by a non-sectarian and impartial board of examiners.

The bill was referred to the Committee on Hygiene and Public Health of the House which is composed of the following persons:

R. L. Von Trebra, M.D., Chairman, Labette County.

T. C. Kimble, M.D., Cloud County.

G. A. Leslie, M.D., Rawlins County.

H. O. Blanchat, D.C., Sumner County.

C. H. Pettit, D.C., Rice County.

Henry C. Abbey, Bourbon County.

Allen P. Hartman, Marshall County.

G. R. Munson, Geary County.

Geo. L. Reid, Greeley County.

The Committee on Hygiene and Public Health is expected to hold a hearing on the bill during the week of February 15 and plans are being made for the following persons and organizations to appear on behallf of the measure: Dr. H. L. Snyder, Winfield; Dr. H. L. Chambers, Lawrence; Dr. E. C. Duncan, Fredonia; Bishop James Wise, Topeka; Bishop August Schwertner, Wichita; Dr. Philip C. King, Washburn College, Topeka; Dr. Thomas Butcher, Emporia Teachers College, Emporia; The Kansas Nurses Association; The Kansas Pharmaceutical Association; The Kansas Hospital Association; The Kansas Veterinary Medicine Association;

approximately fifty chiropractors; and Clarence Munns.

One of the most interesting developments in connection with the current Basic Science Law campaign has been the activity by a sizable number of chiropractors in the state to join in endorsement of the bill. The following excerpts from a bulletin issued by that group under date of January 28 are of interest in this connection:

To All Kansas Chiropractors Important and Confidential "Dear Doctor:

It has become evident during the past week that the Legislature is tiring of the frequent chiropractic-medical fight on the basic science law, and that to dispose of the question, it is going to ask the medical profession to make several concessions, and thereafter pass a basic science law. This situation has been brought about by reason the medical profession has issued a pamphlet wherein it has produced letters from many chiropractic schools stating that their graduates are trained in and can pass a basic science examination: and also through the

fact that the medical men have organized during the

past two years to the extent that they have more

than seventy-five per cent of the House and Senate

promised to the bill.

Since in our current activities, we have consistently encountered this opinion, a group of approximately ten licensed chiropractic members and myself have taken it upon ourselves to determine whether the medical profession would be willing to cooperate in a settlement of the problem, once and for all.

The matter therefore stands in the following position: We can refuse and probably see a basic science law passed which may be unsatisfactory in form and without anything in return—or we can probably grasp an opportunity to have a basic science law passed which will be satisfactory in form, inasmuch as it will not affect any present chiropractors, and in return we may be able to remove many of our legal obstacles.

It should also be said that the medical profession plans to commence enforcement of many of the above provisions in the event the chiropractic profession again attacks the basic science law in the present session. Seemingly, therefore, it behooves every chiropractor to commence worrying more about these things than a basic science law which will definitely not affect him in any way.

If you are in accord with these recommendations, we shall move with all haste toward attempting to reach a satisfactory agreement, and we shall report further to you before any transaction is made. Please answer immediately by AIR MAIL OR WIRE.

P. S. We suggest also that you not send any petitions or letters against the Basic Science Law until the above matter is settled. To do so may cause the medical profession to believe we are not acting in good faith—in the event we decide to complete arrangements".

Several other interesting communications pertaining to the Basic Science Law are as follows:

A letter from the Kansas Optometric Association under date of February 1:

'To: All Members of the Legislature:

You have probably received a considerable number of letters from members of our profession requesting

an amendment that optometrists not be included in the Basic Science Law.

These letters were prompted by reason of a misunderstanding developing over the word 'optometrists' being omitted from among those professions to be excepted from the requirements of the law in a pamphlet carrying a copy of the proposed law.

Officials of this Association have conferred with officials of The Kansas Medical Society in regard to this, and we have been told officially that there is no intention on the part of the medical profession to include optometrists as coming under the provisions of the proposed law.

In view of this and that optometrists will be listed along with dentists, nurses, and others, as exceptions in the bill when it is introduced, the requested amendment will not be necessary.

Under the circumstances arising out of this, we felt this explanation expedient to avoid any misunderstanding as to the relations between the professions of optometry and medicine".

A letter from Representative H. O. Blanchat, D. C., to the members of the legislature under date of January 8:

"Dear Representative:

In these last few days before that hectic session begins, I want to discuss a subject, which as a Chiropractor is near my heart. Have found proof that we again are to be pestered during the session by the introduction of a so-called Basic Science Bill.

We are promised it is to have a more seductive name! But it is sure to be as vile as the ingenuity of a highly trained, thoroughly organized body of men can make it. It purports to protect the citizen from a body of the most ignorant persons in the world, and at the same time the claim is made that we are able to decieve the public into handing over their cash to our ignorant, debased profession. Its real aim is to put us into the control of our competitors, thereby exterminating us and denying the public the liberty of having a choice of systems of healing when sick. Nine states now have this law. No Chiropractor has been able to pass this examination unless he also is an M.D. In fact, after a great number tried and failed, some of the most eminent scholars were induced to try it in the guise of Chiropractor and failed. The Osteopath has no better luck as he too fails, regardless of his educational qualifications. Eradication of all healers except the Allopath is its aim.

Chiropractors are without any exception the best qualified healer to practice their profession of any and all doctors. Their practice is limited to a very narrow field, though of the utmost importance to the sick as is testified by the results attained on their patients.

Our schools are not endowed nor supported by taxation as is the case of the Medical Institutions, so cannot carry on the long term of the medics. Nor do they need to do so. We do not use the hundreds of poisonous drugs which injure the system even when properly dosed as medicine, or the knife. We simply bring about perfect mechanical relationship of the bony frame of the body, bringing about normal tension, removing pressures, etc., and allow-

ing normal functioning of organs. While we need supreme skill in this work, it does not require years to become very efficient in it. Nothing but good can come from its administration. Our ability to get patients well, thereby holding them, is the thorn in the flesh of our friend, the M.D. We have not an oversupplied field as is the case with them. We need one hundred thousand more in the U. S. A.—one thousand in Kansas. So why pester the public and us by asking us to take examinations at the hands of our competitor?

We wish no hand in ruling them and we equally resent them having control over us. Too much like the 'Fox Herding the Geese'—tough on the Geese!

Very truly, (Signed) H. O. Blanchat''.

A letter from Representative H. O. Blanchat to the members of the Kansas Chiropractic Association under date of January 19: "Dear—:

We are about to be loaded down with the worst form of the Basic Science Law ever to be drafted. Every member of the House and Senate was threatened with defeat if he did not agree to back this bill. The same story was also put over on his opponent. They had them promised either way the election went so all members generally speaking are pledged to support this bill. This is our situation now. We have no lobby and no money to hire one. I was embarrassed by Clarence Munn telling me before House Member Malin of Edwards County, Lieut. Governor Lindsay and several other Legislators, that I was speaking for only ten Chiropracotrs when I opposed the Basic Science Bill and that four hundred of you were against it and that he was telling an untruth.

Now here is what I need and must look to you to give me: First, I want a fine large petition from every Chiropractor against the Basic Science Law or any law which puts us into the hands of our competitor, the Doctor of Medicine, or centralizes the control of the Healing Arts; beside that, I want an average of one hundred letters to each Senator and Representative, telling them you are opposed to this nasty law in any form pleasing to the Allopath. I want more, I want every one of you to join the Kansas Chiropractic Association NOW. If you do not want to help, then get someone else to look after your interests and do it now, as in two or four weeks it will be too late.

Be well advised this law gets us ALL in less than three years by the renewal clause which it will have injected into it. The blood is now on your hands. We either go in together or we go out together. I am putting in six months for \$150.00.

Are you willing to do what is necessary to save us? It is up to you to act now.

Yours very truly, H. O. Blanchat.''

It is the opinion of officials of the Society that the Basic Science Law has an excellent chance for passage in the present term. All counties irregardless of whether or not they organized as county medical societies are urged to make every effort during the coming month to see that their part of the legislative program (as described in

the eight recent legislative bulletins) is complied with to the fullest extent.

Approximately twenty bills pertaining to the Social Security Act have been introduced to date. All of these effect medicine to some extent and arrangements have been made for the Society to be given a special hearing on the medical phases of the Act before the legislative committees handling this matter. The Social Security Act program prepared by the Medical Economics Committee of the Society will be presented at this hearing. The Legislative Committees and members thereon in charge of the Social Security Act are as follows:

House:

Ray Smith, Barton County, Chairman.

C. G. Guard, Mitchell County.

Edwin F. Abels, Douglas County.

E. M. Angell, Meade County.

Clay C. Carper, Greenwood County.

Harold Medill, Montgomery County.

I. T. Richardson, Lyon County.

Paul R. Wunsch, Kingman County.

H. O. Blanchat, D.C., Sumner County.

M. E. Bolan, Sedgwick County.

T. C. Kimble, M.D., Cloud County.

James F. Malin, Edwards County.

Donald Muir, M.D., Harper.

Senate:

J. B. Carter, M.D., Ellsworth County, Chairman.

Wilfred Cavaness, Neosho County.

Benjamin Endres, Leavenworth County.

W. A. Barron, Phillips County.

Walter J. Jones, Reno County.

Walter E. Keef, Glen Elder County.

Ernest F. Pihlblad, McPherson County.

Charles Richard, Nemaha County.

Ed. T. Hackney, Sumner County.

W. C. Harris, Lyon County.

Joseph S. McDonald, Wyandotte County.

Bills of interest to the medical profession which have been introduced to date are as follows:

HB 75. A bill providing for the compulsory sterilization of males under sixty-five and females under forty-five who have syphilis.

SB 29 and HB 123. A bill providing for state inspection of industrial boilers and which in certain definitions inadvertently include physicians' sterilizers and dentists' vulcanizers.

SB's 3, 4, 24. Relating to traffic regulations and providing a possible means for collection of hospital and physicians fees incurred in automobile accidents.

HB 71. An act amending the classification of claims against deceased persons and providing a way wherein it would be possible for obligations due physicians to be placed on the same priority basis as those due morticians.

SB 116. An act to establish a state pneumonoconiosis and tuberculosis sanitarium in Cherokee County.

HB 152. An act relating to speculative securities which is possibly broad enough to include pre-payment medical concerns.

SB 6. An act extending the statute of limitations in certain cases which might possibly effect mal-practice claims.

HB 162. Relating to workmen's compensation.

SB 82. Relating to fraternal benefit societies.

SB 20. An act increasing the salaries of certain state officials and including the State Board of Health and the Board of Administration.

SB 105. An act transferring the administration of

the Kansas deaf and dumb school and the Kansas blind school from the Board of Administration to the Board of Regents.

SB 110. An act providing for the qualifications of superintendents and instructors in the Kansas deaf and dumb school and the Kansas blind school.

SB 155. An act relating to solicitation of patients and advertising by dentists.

SB 1. An act amending the privileged testimony statute and including exceptions for physicians and surgeons.

SB 15. An act authorizing the State Board of Health to provide death certificates and birth certificates for a fee of 25c.

Senate Resolution 2. An act restoring the salaries of the employees of state hospitals and state institutions to pre-depression levels.

SB 30. An act which would deprive the Kansas State Board of Health from sending inspectors into counties and would transfer these duties to local sheriffs and peace officials.

HB 66. An act relating to licensure for laboratory technicians.

SB 65. An act amending the execution exemption statute and including exemption of the library, instruments, and office furniture of physicians.

HB 104. An act providing that the state must pay maintenance costs for any insane persons who can not be admitted to a state hospital.

SB 31. An act which would transfer workmen's compensation cases to the probate courts of the various counties.

Senate Resolution 6. An act which would establish a commission composed of one member appointed by the Dean of the University of Kansas School of Medicine, another by the President of The Kansas Medical Society, and three members appointed by the Governor to study the maximum non-intoxicating alcoholic content of beer and wines and to report thereon at the next session of the legislature.

SB 137. An act relating to the adjudication of insane

Approximately 20 bills pertaining to the Social Security Act.

BOARD OF ADMINISTRATION

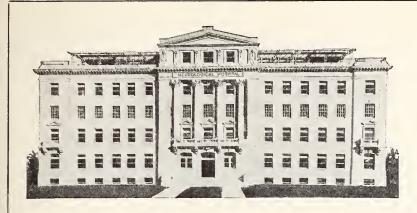
Governor Walter Huxman announced recently the appointment of Dr. Leo V. Turgeon, Wilson, to the State Board of Administration for a term of four years and the re-appointment of Dr. James Scott, Lebanon, for a temporary term.

Additional comment is contained in an editorial elsewhere in this issue.

STATE MEETING

Additional acceptances which have been received to date for the scientific program of the 1937 state meeting are as follows: Dr. Earl C. Padgett, Kansas City, representative of the University of Kansas School of Medicine; Dr. Thomas G. Orr, Kansas City; and Dr. C. F. Taylor, Norton.

The local committee in charge of commercial exhibits has announced that reservations for commercial exhibits have already been received from the following concerns:



NEUROLOGICAL HOSPITAL

Twenty-Seventh and The Paseo

Kansas City, Missouri

Modern Hospitalization of Nervous and Mental Illnesses, Alcoholism and Drug Addiction.

THE ROBINSON CLINIC

G. WILSE ROBINSON, M.D.

G. WILSE ROBINSON, Jr., M.D.

MID-WEST RESEARCH LABORATORY

Established 1920

LANCE C. HILL, A.B., Director

HEMATOLOGY, BACTERIOLOGY, SEROLOGY

Freidman's test (for pregnancy) -\$5.00

24 hour service

Mailing containers sent on request

EMPORIA

KANSAS



OAKWOOD SANITARIUM

The beauty and quietness of the environment of Oakwood Sanitarium cannot be over emphasized. This makes the Institution ideal not only for nervous and mental patients but for convalescents and rest cures as well. Alcoholics and drug addicts are accepted.

Illustrated Booklet and Rates on Request OAKWOOD SANITARIUM Tulsa, Oklahoma, Route 6

NED R. SMITH, M.D. S. CHARLTON SHEPARD, M.D. T. N. NEESE
Medical Director Attending Internist Business Manager Superintendent

General Electric X-Ray Corporation. Petrolagar Laboratories. Mead Johnson & Company. Medical Protective Company. Bard-Parker. Merck & Company. American Optical Company. Quinton-Duffens Optical Company. Greb X-Ray Company. Rosenthal X-Ray Corporation. Midwest Surgical Supply. Riggs Optical Company. Fischer Diathermy Lederle Laboratories. E. R. Squibb & Sons. Geo. E. Breon Company. The W. E. Isle Company. Lepel Laboratories. Horlick's Malted Milk. Lea and Fehiger.

An effort is being made by the Committee on Scientific Exhibits to present the largest section of this kind ever held. The committee particularly desires to hear from all members who would be willing to present an exhibit.

Plans are being made to hold the usual trap and golf tournaments. A sizable list of prizes will be presented.

The complete scientific program for the meeting will be announced either in the March or April Journals.

CANCER CONTROL PROGRAM

The Committee on Control of Cancer is completing plans to hold during March, a Cancer Control Program similar to the one held last year. It is probable that six professional and six lay meetings will be held at six different geographical locations in the state.

Additional announcements concerning speakers and details of the program will be issued in the near future.

SPECIAL MEETING

The special meeting of presidents, secretaries, and delegates of county medical societies was held at the Hotel Jayhawk, in Topeka, on January 24.

Approximately 100 representatives from most counties in the state were present and discussion and decision was had concerning several legislative matters.

The Committee on Public Policy also held a meeting during the forenoon of the same day.

GUEST SPEAKER

Mr. Mac Cahal, executive secretary of the Sedgwick County Medical Society was a guest speaker at a meeting of the Arkansas State Medical Society held in Little Rock on January 9. His talk pertained to the organization plan of the Sedgwick County Medical Society and the following comment concerning his talk is contained in the February issue of the Journal of the Arkansas Medical Association:

"Cahal holds his audience in rapt attention as he recounts how and what a real county medical society can do for the physician. Pulaski County immediately arranges for a repeat talk in the evening so that their membership may personally receive the message. This talk we consider one of the most inspiring we have heard. The knowledge of the good it will do dispels our gloom over apparent lack of interest in the conference".

WOMEN'S FIELD ARMY

The Women's Field Army of the American Society for the Control of Cancer of which Mrs. Donald Muir, of Anthony is the commander-in-chief for Kansas. is progressing rapidly with its organization.

The group will be organized to coincide with the Councilor Districts of the Society, will consist of women who are interested in the educational phase of the cancer problem and will operate under the direction of the Society Committee for the Control of Cancer and the county medical societies.

As soon as the plans in this connection are completed, a detailed bulletin of recommended procedure will be issued to the county medical societies.

SOCIAL SECURITY ACT

The following communication has been received by the central office from Mr. H. D. Baker, Collector of Internal Revenue, Wichita, with the request that it be published in The Journal for the information of the Society:

Forms SS-1 have been mailed by the Collector of Internal Revenue for the District of Kansas to all potential Old Age Benefit taxpayers of record in his office. These include employers of one or more persons residing in Kansas except farmers, governmental agencies, religious, charitable and educational institutions, and employers of domestics in homes. Obviously, not all employers who are liable for taxes under this section of the Social Security Act are on the Collector's list. On the other hand, quite likely forms have been mailed to some who may not be liable for returns. Those who are employers of one or more persons, either full or part-time. whether or not those employees have registered with the Social Security Board and have received a number, should communicate with the Collector of Internal Revenue at Wichita and request that forms be sent to them. The returns are to be filed monthly.

January tax is due and the returns must be filed during the month of February. Information relative to the taxing features of the Act may be obtained from H. D. Baker, Collector of Internal Revenue, Wichita, Kansas.

NATIONAL SOCIAL HYGIENE DAY

The Shawnee County Medical Society and the Kansas State Board of Health in conjunction with a committee headed by Mrs. J. H. Whipple, Topeka, presented a public meeting at the Topeka High School Auditorium in Top-ka on February 3 in recognition of National Social Hygiene Day. Approximately 900 physicians and laymen attended the meeting and the Following program was presented:

Introduction of Dean John Warren Day, presiding Chairman, Mrs. James Whipple.

Venereal Disease and its Diagnosis, Dr. J. L. Latti-

CONSERVATION OF ESSENTIAL ELEMENTS IN PROTECTIVE FOODS

II. THE VITAMINS

Refinement of vitamin assay methods has made practical many quantitative studies which had hitherto been impossible. Employment of these methods has yielded evidence which indicates that many factors may influence the vitamin content of foods which come to the table; in particular, the fruits and vegetables. Variety, maturity, time and temperature of storage after harvesting, and method of preparation, all have been found to affect the ultimate vitamin content of common foods. Several examples of the extent to which certain of these factors operate might well be given.

It has been shown that spinach slowly loses its vitamin C potency even in low temperature storage; at room temperature, one-half of the vitamin C is lost in three days; practically all antiscorbutic potency disappears in seven days (1).

Another report indicates a loss in vitamin C of 78 per cent in spinach stored two days at room temperature and 80 per cent loss in asparagus tips during four days' storage (2).

The vitamin C content of apples is markedly reduced during cold storage: 20 per cent in 4 to 6 months and about 40 per cent in 8 to 10 months (3).

Vitamin A in apples is, however, subject to less destruction than vitamin C during prolonged storage (4).

Prolonged cold storage of pears may result in a loss in the vitamin A and vitamin C content of nearly 50 per cent (5). Further, solution losses which may occur during cooking vary with the individual product and with the method used in cooking. From 40 to 48 per cent of vitamin C may be lost to the water in which peas are cooked (6).

Vitamin C losses in 12 different vegetables have been reported to vary from 12 per cent in asparagus to 80 per cent in white onions (7).

These data demonstrate the seriousness of solution losses of vitamin C. It is considered probable that other water soluble vitamins are affected in a similar way.

Thus, by the time fruits and vegetables spend some days in transit or storage before reaching the kitchen and are cooked by the usual home method, much of the original vitamin content may have been lost. Little can be done to prevent storage losses when fresh fruits and vegetables are not available from the home garden, but solution losses may in part be overcome by using the cooking water.

Fortunately, in the commercial canning procedure, products are harvested at the optimum stage of maturity and canned immediately, using only a limited quantity of water which is retained in the can. As a result, storage losses of the vitamins are reduced (8), and solution losses may be eliminated by the use of the liquid in which the food is canned.

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(1) 1936. Food Research 1, 1. (2) 1936. J. Soc. Chem. Ind. 55,153T. (3) 1933. J. Agr. Res. 46, 1039. (4) 1936. Food Research 1, 121.
(5) 1934. J. Am. Diet. Assn. 10, 217.
(6) 1936. J. Nutrition 12, 285.

(7) 1936. J. Home Econ. 28, 15.(8) a. 1921. Proc. Soc. Exp. Biol. Med. 18, 164 b. 1928. Ind. Eng. Chem. 20, 202 c. 1929. Ibid. 21, 347 d. 1932. J. Home Econ. 24, 826

This is the twenty-first in a series of monthly articles, which will summarize, for your convenience, the conclusions about canned foods which authorities in nutritional research have reached. We want to make this series valuable to you, and so we ask your help. Will you tell us on a post card addressed to the American Can Company, New York, N. Y., what phases of canned foods knowledge are of greatest interest to you? Your suggestions will determine the subject matter of future articles.



The Seal of Acceptance denotes that the statements in this advertisement are acceptable to the Council on Foods of the American Medical Association. more, Director of Lattimore Laboratories, Topeka.

Congenital Syphilis, Dr. Chas. C. Dennie of the Faculty of the University of Kansas Medical School, and Director of the Congenital Syphilis Clinic of Mercy Hospital, Kansas City, Missouri. Neuro-Syphilis. Dr. Wm. C. Menninger, Menninger

Clinic, Topeka.

The Venereal Disease Problem from a Corporation Point of Viey, Dr. Forrest L. Loveland, Medical Director, John Morrell & Company, Topeka.

Venereal Disease Control, Dr. R. H. Riedel, Director of the Venereal Disease Division of the State

Board of Health, Topeka.

Treatment of Venereal Disease in the Indigent, Dr. Arthur D. Gray, Director of the Municipal Venereal Disease Clinic, Topeka.

DR. FRANK SMITHIES

Dr. Frank Smithies, Chicago, Illinois, well known gastro-enterologist died February 9 at his home in Chicago. He was author of numerous articles and books and the Editor of the American Journal of Digestive Diseases and Nutrition, and frequently appeared on medical programs in Kansas.

NORTHWEST CONFERENCE

Dr. Arthur D. Gray, Topeka, will present a paper describing the activities and plans of the Society Committee on Venereal Disease at the annual Northwest Medical Conference to be held at the Palmer House in Chicago on February 14. Discussion of Dr. Gray's paper will be led by Dr. Paul A. O'Leary, of Rochester, Minnesota, and Dr. Earl Whedon, of Sheridan, Wyoming.

This Conference which represents one of the largest of its kind in the country, pertains mainly to the economic and organization plans of state medical societies.

The complete program of the Conference is as follows:

MORNING PROGRAM

- 9:30 Report of Survey, R. L. Sensenich, M.D., South Bend, Ind.
- 9:50 University Courses, Harold S. Diehl, M.D., Dean, University of Minnesota Medical School, Minneapolis, Minnesota.
- 10:00 Refresher Courses, M. H. Rees, M.D., Dean, University of Colorado School of Medicine, Denver, Colo.
- 10:10 Formal Local Courses, S. D. Maiden, M.D., Council Bluffs, Ia.
- 10:20 Interstate Postgraduate Courses, Jas. D. Mc-Carthy, M.D., Omaha, Nebraska.
- 10:30 Clinic Courses, Herman H. Riecker, M.D., Ann Arbor, University of Michigan.
- 10:40 Discussion led by Ralph R. Wilson, M.D., Kansas City: M. C. Smith, Executive Secretary, Nebraska State Medical Society, Curtis, Nebraska.
- 10:55 Economic Education, E. J. Carey, M.D., Dean Marquette University School of Medicine, Milwaukee, Misc.
- 11:15 Economic Education of the Medical Student, Wm. J. Burns, Executive Secretary,

- Michigan State Medical Society, Lansing, Michigan.
- 11:25 Economic Education of the Doctor, E. S. Hamilton, M.D., Kankakee, Illinois.
- 11:35 Discussion led by C. F. Kemper, M.D., Denver, Colorado; T. F. Thornton, M.D., Waterloo, Iowa.
- 11:50 Greetings from the American Medical Association, Olin West, M.D., Secretary, Chicago.
- 12:05 Hospital and Health Insurance, James L. Smith, M.D., Peoria, Illinois.
- 12:20 Discussion led by John R. Neal, M.D., Springfield, Illinois; Carl F. Vohs, M.D., St. Louis, Missouri; T. A. Hendricks, Executive Secretary, Indiana State Medical Society, Indianapolis.

Luncheon 12:30 Noon AFTERNOON PROGRAM

- 2:00 Survey of Activities of State Governments and State Medical Societies, Chas. S. Nelson, Executive Secretary, Ohio State Medical Society, Columbus, Ohio.
- 2:30 Maternal and Child Welfare, Alfred W. Adson, M.D., Mayo Clinic. Rochester, Minnesota.
- 2:45 Public Health Services (Resettlement Administration), A. D. McCannel, M.D., Minot, North Dakota.
- 3:00 Discussion led by S. E. Gavin, Fond du Lac, Wisconsin; Elmer G. Balsam, M.D., Billings, Montana.
- 3:30 Venereal Disease Program, Arthur D. Gray, M.D., Topeka, Kansas.
- 3:45 Discussion led by Paul A. O'Leary, M.D., Rochester, Minn.; Earl Whedon, M.D., Sheridan, Wyoming.
- 4:00 State Boards of Health, Frank Jirka, M.D., Director of Public Helath, Springfield, Illinois.
- 4:15 Discussion led by Philip Kreuscher, M.D., Chicago, Illinois; J. F. D. Cook, M.D., Langford, South Dakota.

The Society is particularly proud to have Dr. Gray extended this honor inasmuch as it will afford an opportunity to describe the very interesting program now being sponsored by the Committee of which he is chairman and also by reason that it represents the second consecutive year in which a Kansas speaker has been invited to participate in the program. Last year Dr. F. L. Loveland, Topeka, presented a paper on the medical economic activities of the Society.

COUNTY SOCIETIES

The Anderson County Medical Society met in Garnett on January 20. Dr. L. F. Barney, and Dr. C. J. Mullins. of Kansas City were the speakers on the program. Their subjects were respectively, "Intestinal Operations" and "Acute and Chronic Diseases of the Eye as Met by the General Practitioner".

Dr. C. H. Finney, Atchison. was elected president of the Atchison County Medical Society, at its regular monthly meeting in Atchison on January 14. Other officers elected were: Dr. G. A. Patton, Atchison, vice president; Dr. Arthur Whitaker, Atchison, secretary-

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treasurer; Dr. T. E. Horner, Atchison, censor; and Dr. Finney and Dr. Horner, state meeting delegates.

Approximately twenty members of the Butler-Greenwood County Medical Society met in ElDorado on January 8 for their regular monthly meeting. Dr. H. L. Snyder, Winfield, and Dr. R. B. Stafford, Kansas State Board of Health, Topeka, were the principal speakers. Dr. Snyder presented a short talk on the Basic Science Law and the Social Security Act, and Dr. Stafford spoke on "Full-time County Health Unit".

Members of the Clay County Medical Society held a meeting in Clay Center on January 20, with Dr. Fritz Teal. Lincoln, Nebraska, as the speaker. His topic was "The Treatment of Arthritis by Rest and Conservative Methods".

Dr. A. N. Gray, Burlington, and Dr. A. B. McConnell, Burlington, were reelected president and secretary respectively of the Coffey County Medical Society at a meeting of that society held in Burlington on January 20. Dr. H. M. Benning, Waverly, gave the principal address of the evening and spoke on endocrine disorders.

The Cowley County Medical Society met in Arkansas City on January 21. A Clinicopathological Conference was held with all members participating.

A dinner-meeting of the Crawford County Medical Society was held in Pittsburg on January 28, with Dr. C. F. Taylor, Norton, and Dr. Clifton Hall, Kansas State Board of Health, Topeka, as the speakers.

Members of the Dickinson County Medical Society were hosts to the Saline County Medical Society at a dinner-meeting in Solomon on January 21.

Dr. F. G. H. Meckfessel, Lewis, was elected president of the Edwards County Medical Society at a meeting held in Kinsley on December 30. Others elected were: Dr. W. P. Stoltenberg, Kinsley, vice president; Dr. F. E. Dargatz, Kinsley, secretary-treasurer.

The Ford County Medical Society met in Dodge City on January 8 for its annual election of officers. The following were reelected to serve during 1937: Dr. R. G. Klein, Dodge City, president; Dr. G. O. Speirs, Spearville, vice president; Dr. C. L. Hooper, Dodge City, secretary.

Dr. L. C. Joslin, Harper, and Dr. Charles Pokorny, Attica, have been elected president and secretary, respectively, of the Harper County Medical Society for the ensuing year.

Members of the Harvey County Medical Society met in Newton on January 4 with Dr. H. R. Schmidt, Newton, Dr. G. A. Westfall, Halstead, and Dr. M. C. Martin, Newton, as the principal speakers. Their subjects were respectively, "Diseases of the Kidneys", "Diseases of the Liver" and "Problems of Public Health".

Election of officers for 1937 was held at a meeting of the Linn County Medical Society in Mound City on December 23. The following officers were reelected: Dr. S. D. Morrison, La Cygne, president; Dr. L. D. Mills, Mound City, vice president; and Dr. H. L. Clarke. LaCygne, secretary-treasurer. Health problems of the county and immunization were the chief topics of discussion.

The Marion County Medical Society met in Marion on January 6 and Dr. J. H. Saylor, Marion, gave a brief resume of the health statistics of Marion County for the year 1936.

Members of the Marshall County Medical Society held their annual election of officers at a meeting in Marysville on January 21. All officers were reelected as follows: Dr. W. R. Breeding, Marysville, president: Dr. R. L. McAllister, Marysville, vice-president: Dr. H. H. Haerle, Marysville, secretary-treasurer.

Members of the Riley County Medical Society held their annual election of officers at a meeting in Manhattan on January 13. Those elected were: Dr. L. G. Balding, Manhattan, president; Dr. J. D. Colt, Jr., Manhattan, vice president; Dr. Myron Husband. Manhattan, secretary-treasurer; Dr. H. T. Groody, Manhattan, board of censors; Dr. D. L. Evans, Manhattan, state meeting delegate. A short talk on "Bone Fractures" was given by Captain C. O. Bishop, Fort Riley.

The Sedgwick Medical-Dental Credit Club held a meeting in Wichita on January 5 with Mr. John W. Klein, Wichita, sales supervisor for the Southwestern Bell Telephone Company as the principal speaker on the use of the telephone. His subject was "Little Bits of Telephony". Dr. C. H. Warfield, Wichita, presented a short message of appreciation to Mr. Klein on behalf of the medical men. Commencing with the January issue, a new cover appeared on the Bulletin of the Sedgwick County Medical Society. The cover is attractively prepared and will include the picture of a different medical school each month.

The February 1 meeting of the Shawnee County Medical Society was held at the Menninger Sanitarium in Topeka. A program was presented by the following members of the Menninger staff: Dr. William C. Menninger; Dr. Robert P. Knight; Dr. Norman Reider; Dr. Harry N. Roback; Dr. Carroll C. Carlson; and Dr. Nathan W. Ackerman.

Dr. H. E. Morgan, Fredonia, presented a series of motion pictures illustrating "Development of Anesthesia" at the monthly meeting of the Wilson County Medical Society held in Neodesha on January 18.

Members of the Wyandotte County Medical Society met in Kansas City on January 19. The program was as follows: Dr. H. R. Wahl, Pathological Conference; Dr. L. G. Allen, "Tumor of Breast"; Dr. M. A. Walker, "Tularemia". All speakers were of Kansas City.

MEMBERS

Dr. Charles F. Attwood, Topeka, has returned from Los Angeles, California, where he has been engaged in postgraduate study during the past few months.

Dr. J. D. Bowen, Whiting, has established an office in Holton. He will also maintain his present office at Whiting.

The following physicians have been appointed as county health officers in their counties: Dr. W. K. Fast,

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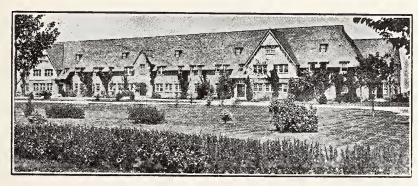
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Atchison, Atchison County; Dr. Fred L. Holcomb, Coldwater, Comanche County; Dr. W. S. Gooch, Fort Scott, Bourbon County; Dr. L. F. Schumacher, Meade, Meade County; and Dr. W. L. Wilmoth, Blue Rapids, Marshall County.

The December 1936 issue of the American Journal of Digestive Diseases and Nutrition carried an article entitled "Beriberi Due to a Reducing Diet" by Dr. Maurice Snyder, Salina.

Dr. E. H. Terrill, Wichita, presented a paper before the Kay County Medical Society, in Blackwell, Oklahoma. on January 21, entitled "Medical Treatment of Gall Bladder Disease", and Dr. A. E. Bence, Wichita, spoke on "Fractures of the Elbow" at the same meeting.

Mr. Lance Hill, owner of the Midwest Research Laboratory, at Emporia, has installed an electrocardiograph in his offices.

The Menninger Clinic. Topeka, will hold its third annual postgraduate course on Neuropsychiatry in General Practice on April 19-24 in Topeka. As in previous years several prominent guest speakers will appear on the program. The detailed program will be announced at a later date.

DEATH NOTICES

Dr. Robert Algie, 61 years of age, died at his home in Clay Center on January 25. Dr. Algie was born in Glasgow, Scotland, in 1876 and moved to America at the age of ten years. He received his early training in the schools in Washington County, Kansas, and graduated from the Barnes Medical College in St. Louis, Missouri, in 1899. He began his practice in Linn. Kansas, but moved to Clay Center and practiced there for twenty years until the time of his death. He served as a medical officer in the World War in Camp McClellan, Aniston, Alabama, and was later transferred to Camp Gordon in Georgia. He was a member of the Clay County Medical Society.

Dr. Harry Hubbard Brookhart, 65 years of age, died in an automobile accident a few miles from his home in Columbus on January 29. Dr. Brookhart was born in 1872 and received his medical training at the Marion-Sims College of Medicine, St. Louis, Missouri, from which he graduated in 1895. He started practicing in Scammon and later moved to Columbus where he continued his practice until his death. He served in the Medical Corps during the World War. He was president of the Cherokee County Medical Society.

Dr. Ira T. Gabbert, 84 years of age, died at the Caldwell Hospital in Caldwell on December 30. Dr. Gabbert was born in Platte County, Missouri, in 1852 and received his pre-medical training at William Jewell College in Liberty, Missouri. He graduated from the Jefferson Medical College, Philadelphia, in 1883. He entered into a partnership with a pharmacist in 1886 and continued his practice of medicine until his retirement several years ago. He was a former member of the Sumner County Medical Society.

Dr. Albert R. Knapp, 85 years of age, died at his home in Garden City on January 1. Dr. Knapp was born in West Mill Grove, Ohio, in 1851 and received his medical

training at the Curtis Physio-Medical Institute. Marion, Indiana, from which he graduated in 1886. He practiced medicine for fifty-one years, thirty-one of which was spent in Garden City. He was a member of the Finney County Medical Society.

Dr. Robert A. Taylor, 55 years of age. died in Christ's Hospital in Topeka on January 31. Dr. Taylor was born in Jefferson County, Indiana in 1881. and moved to Nortonville in 1883. He received his degree in medicine from the Kansas Medical College, Topeka, in 1906 and began his practice in Haven. He later moved to Meriden and after serving in the World War established an office in Topeka. He specialized in internal medicine. He was a member of the Shawnee County Medical Society.

Dr. Lloyd P. Warren, 67 years of age, died in Wichita on January 10. Dr. Warren was born in Ashland. Missouri, in 1870 and received his degree in medicine from Beaumont Medical College in St. Louis. Missouri, in 1903. He began his practice in Clearwater, Kansas, and later moved to Wichita where he was a specialist in eye, ear, nose and throat for twenty-seven years. He was a member of the Sedgwick County Medical Society.

AUXILIARY

Edited by Mrs. W. G. Emery, Press Publicity Chairman

Mrs. L. B. Gloyne, President, comments:

"The campaign to increase the circulation of the Hygeia in Kansas is most encouraging. Most county auxiliaries have provided the principal schools of their respective counties with this publication. I greatly appreciate the cooperation of the constituent membership in this work, and in the all important program of self and public education in regard to the Basic Science Law, soon to be presented in the legislature. I should urge the continuance of steadfast cooperation with the Medical Society.

May I advise all state chairmen that the material for their annual reports should be gathered and ready for prompt dispatch? I shall issue a call for these reports soon.

I have been invited to visit several of the county auxiliaries. There is nothing which gives me greater pleasure and I shall go to Wilson County February 8; Sedgwick, February 10. Other counties and dates are as yet undetermined.

After receiving a letter from Mrs. Donald Muir asking for nominations of ladies to serve as sub-commanders in the Womens Army to Combat Cancer, I wrote to the president of each county auxiliary requesting the appointment of a member as sub-commander. Until now I have received only three replies, resulting in the appointment of these ladies: Mrs. Foster L. Dennis, Ford County; Mrs. Merle Ruble, Labette County; Mrs. P. G. H. Vander Wyst, Altoona, I urgently request those who have failed to reply to do so as soon as possible".

Labette County Auxiliary, which has been aggressively busy from the scorching heat of last summer to

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Newborns require breast milk. Deprived of human milk, their nutritional requirements are met by simple mixtures of cow's milk, sugar and water. The milk may be fresh, evaporated, dried, sweet or sour; the sugar simple or mixed.

Whole milk formulas are suitable for most newborns with good digestive capacities. The amount of whole milk given should approximate $\frac{2}{3}$ of the total required calories. And the remainder $(\frac{1}{3})$ should be in added Karo. Water is added to the mixture for the fluid intake to be about $2\frac{1}{2}$ ounces per pound of baby weight per day.

Evaporated milk formulas are indicated for newborns with limited digestive capacities. They may be used to advantage in considerably higher concentrations than whole milk for premature, feeble and debilitated infants. The added Karo is again one-third of the total required calories.

Dried milk formulas are suitable for allergic infants who will take only small volumes at a feeding and for babies of allergic parents. Formulas approximately equivalent to whole milk may be made up with water and Karo added in the same ratio as in whole milk mixtures.

Acid milk formulas are of particular value for babies with low digestive capacities requiring large food requirements. Acid milk requires no dilution with water. The amount of Karo required may be

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Powder	red	Mi	lk		•	•		5 tablespoons
Boiled	Wa	iter						. 20 ounces
Karo	•	•	•	•	•	•	•	2 tablespoons
Lactic .	Aci	d M	ilk		•		•	. 12 ounces
Boiled	Wa	iter						. 8 ounces
Karo	•	•	•	•	•	•		2 tablespoons

References: Kugelmass, Clinical Nutrition in Infancy and Childhood, Lippincott; Marriott, Infant Nutrition, Mosby; McClean & Fales, Scientific Feeding in Infancy, Lea & Febiger.

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the icy roads of the present season, has the honor of being the first county auxiliary to forward dues to the state treasurer without a delinquent member.

Mrs. L. B. Gloyne asks that this column again remind county treasurers that dues are now payable, and that only a short time remains until the state treasurer must send in her membership report to national headquarters.

A delightful social event in Wichita was the covered dish luncheon of the Sedgwick County Auxiliary at the home of Mrs. James S. Hibbard. Following the luncheon an interesting musical program was presented by the ladies string quartette. Dr. J. W. Shaw, newly elected president of the Sedgwick County Medical Society, was the speaker, his subject being "The Story of Insulin". The guest list included fifty-three ladies.

The Executive Board of the Sedgwick County Auxiliary met at luncheon in the new home of Mrs. J. V. Van Cleve. A business meeting followed the luncheon. It is assumed that the events described in the preceding items occurred on different dates; but the clippings, while specific in stating the time, one at 12:30, the other at 1 o'clock, failed to record the date.

At a dinner meeting of the Ford County Auxiliary, January 9, at the Lora Locke Hotel in Dodge City, Mrs. Foster L. Dennis was elected president; Mrs. L. F. Schumacher, vice president; Mrs. X. F. Alexander, secretary; Mrs. V. B. Dowlin, treasurer. Annual reports were given and Mrs. Dennis described the state board of directors meeting in Kansas City.

Mrs. C. L. Williams, retiring president, is a charter member of the Kansas Auxiliary, whose membership has

never lapsed.

The Ford County Auxiliary has placed Hygeia in five of the ward schools of Dodge City, also in St. Johns in Spearville, and the grade schools at Spearville, Meade, Satanta, Ford and Bucklin.

The sincere sympathy of the membership of the State Auxiliary goes out to Mrs. L. P. Warren of Wichita in her great bereavement.

The Illinois Auxiliary has prepared to aid the Illinois Medical Society in their legislative program. They anticipate that at least 200 bills will contain matter relating to medicine in some way.

What with the Basic Science Law and the Social Security Act before the Kansas Legislature our own legislative committee will probably find full time work. It behooves the Auxiliary to stand by ready and well prepared.

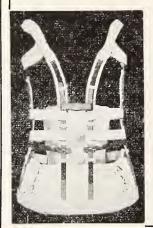
In West Virginia the state medical association set aside a substantial sum of money for the use of their Auxiliary in organization work. Open meetings is one of the program items common to their county auxiliaries.

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EXOMPHALOS*

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Newton, Kansas

This condition which I am about to describe occurred a few weeks ago and is the first case of the kind that I have ever encountered in my private practice. The babe was born of a mother forty-one years of age, a primipara, who weighed 146 ½ pounds early in the pregnancy and 161 1/4 pounds the day she entered the hospital in labor. Her general health has always been good. Her mother had nine children, no twins; all normal. Her menstrual history is negative. The husband's health is very good except there have been some attacks of palpitation and other discomfort due to nervous causes. He is one of a large family who were all well and normal, and is the father of five normal children by his first wife. The mother's blood pressure ranged from 104/68 in the third month of pregnancy to 115/68 during labor. The urine was uniformly normal, and the fetal heart tones were heard at the sixth month in lower left quadrant, rate 142. Thus, as you can see, the mother was quite normal throughout her pregnancy and there was no indication of any abnormality in the baby. The onset of labor was on September 13, 1936, just a month ahead of the normal date for labor as estimated from last menstruation. The first stage was rather long and the pains were severe, but it was otherwise normal. The patient had six grains of pento-barbitol sodium and one-quarter grain morphine per hypo, and rectal analgesia during the first stage. No anesthetic was necessary at the delivery, which was spontaneous in L. O. A. The patient was awake and cooperated nicely, although drowsy enough that she experienced very little pain and afterward felt that she had an easy delivery. The placenta and membranes

*Presented before the Harvey County Medical Society at Newton, November 2, 1936. delivered promptly and normally, and there was a very slight first degree laceration inside the vagina which was repaired by several chromic sutures. The patient made an uneventful recovery and was dismissed from the hospital on the tenth day and has been well ever since.

The babe weighed five pounds five and one-half ounces and at delivery cried lustily. Immediately thereafter the cry and breathing were markedly interfered with by the presence of considerable meconium in the back of the throat, in spite of the fact that the mouth and throat had been thoroughly wiped out with gauze immediately upon delivery, preceding the cry, and at that time there was no meconium in the throat nor even an excessive amount of mucus. The meconium was wiped out of the throat and the babe inverted, and while it continued to breathe, it never appeared vigorous from the time it choked on the meconium in the throat.

It was noted that there was a tumor mass at the cord, slightly larger than a golf ball, of a dark bluish color similar to the color of the cord. It was located about one inch from the abdomen, although the cord as it emerged from the abdomen was slightly larger than average, being about as large as a silver quarter. An immediate attempt was made to reduce this apparent herniation into the cord but it would not reduce. The cord was cut beyond the tumor, the Kane clamp having been applied to the cord as usual, and the babe was wrapped and removed from the delivery table. Further examination of the babe definitely showed a frail, premature male child, apparently otherwise normal except for the tumor at the umbilicus.

Because of the unusual frailty of the babe, immediate operation was not done, as I had the feeling that the baby would not survive the surgical interference at that time but also realizing that delay in operating increased the

probability of an unsuccessful operation later. It was fed a formula with the Breck Feeder and handled as a premature babe in a premature crib, with artificial heat. It nursed fairly well, although did not take as much as the average premature should take. The third day it began vomiting and the fourth day the material vomited contained meconium. There was a small amount of meconium from the anus on the second day, and on the third day an enema secured a little more meconium, but there was never a normal evacuation of a normal amount of meconium. On the fifth day, in spite of the rather hopeless outlook, an attempt was made to surgically correct the abnormality

After opening the membrane covering the herniated viscera, it was discovered that the contents were tightly adherent to the membrane covering them which had by this time become quite dry and brittle and almost black. The sac contained some strands of normal small intestine, but in particular one large dilated sac full of meconium and with a wall so thin that it perforated as soon as touched. As soon as this occurred, an incision was carried upward and downward from the umbilicus in the tissues of the anterior abdominal wall, after using a small amount of apothesine in the skin, and the small intestine was pushed back into the abdomen. The contents of the large sac referred to were evacuated and removed and the perforation closed as well as possible, although the extreme thinness of the wall made this very difficult and probably imperfect. When closed it was reduced without difficulty and the incision closed in two layers. It was necessary to trim the edges about the umbilicus in order to get rid of the hardened membrane which covered the extruded mass. The inner layer was closed with continuous number one plain cat gut and the skin with horse hair sutures and a sterile dressing applied. The baby expired about four hours after the operation.

I want to call attention here to the presence of meconium in the baby's throat immediately after its first and only vigorous cry. Undoubtedly the effort of crying caused regurgitation of meconium from the stomach into the throat, choking the child. The presence of meconium in the stomach is explained by the partial obstruction caused by the anomoly. I am of the opinion that the large sac full of meconium found in the tumor was distended intestine, although there is a possibility that it also was an anomoly attached to the intestine

I was not able to demonstrate that that large sac was definitely a part of the normal intestine, although it was attached to same. A post-mortem could not be secured. The prematurity of this baby and its extreme frailty presented a case that was quite hopeless, but one cannot help wondering if an immediate operation would have given a more satisfactory result.

This condition is quite rare, occurring about once in 6,000 cases, according to Friend of Chicago, who reports a case done by him in 1919. This is not a true condition of hernia, since the contents of the umbilical cord have never been inside the abdomen, there having been a failure in the normal embroylogical process. Normally the greater part of the intestine is developed outside the abdominal cavily in the umbilical sac which is part of the extraembryonic coelom and lies in the proximal part of the umbilical cord. At first it forms a single loop—the umbilical or U-loop—to the apex of which is attached the vitello-intestinal duct, the allontois lying on its caudal aspect.

According to Freshman, normally the intestine enters the abdomen at the third month, the extra-embryonic coelom disappears, and the umbilical ring closes. The vitello-intestinal duct has separated from the apex of the loop some time previously, and the intra-abdominal portion of the allantois remains as the urachus.

In certain cases the extra-embryonic coelom persists, and may retain within its cavity a greater or lesser part of the intestine, resulting in the so-called hernia of the umbilical cord, or true congenital umbilical hernia. This manifests itself as a swelling at the foetal end of the umbilical cord, whose walls, composed of amnion and peritoneum, are very thin, so that the intestinal loops within the sac are readily visible. The diameter of the widest part of the swelling exceeds that of the umbilical opening, which exhibits a real ring formation. The umbilical vessels are spread out on the side of the "sac" from the deep surface of which adhesions may pass to the coils of intestine contained therein. The remnants of the vitellointestinal duct may pass from the intestine to the distal end of the "sac", and in some cases a patent urachus is said to be present in its wall.

Many such cases have been reported, notably by Sheen, who described a case in which there was a hernial protrusion into the cord forming a mass the size of a hen's egg, due to the MARCH, 1937

presence of large and small intestine, and by D'Arcy Power, in whose case about a foot of small intestine was present in a fusiform swelling of the cord near the abdomen. According to Milch this condition occurs in one in 5000 to 6,000 births, and is more common in males than females. Meszaros prefers the term "coeloma funiculi umbilicalis persistens", and is of the opinion that the condition is due to disproportion of the maternal pelvis, with a consequent increase in the curvature of the back of the foetus, thus preventing the extension of the abdominal cavity in the sagittal direction. As a result of the closure of the muscles of the abdominal wall, the abdominal organs developing in the extra-embryonic coelom are excluded from this abdominal cavity.

In 1881 Nicaise referred to the amniotic umbilicus, which is characterised by the absence of skin and muscles around the umbilicus, the defect being replaced by amnion, which is reflected upon the abdomen from the umbilical cord. The surrounding muscles are usually in-

tact. The absence of the abdominal wall at this point results from a failure of cleavage of the epidermal and mesodermal structures in the midline—i.e., non-formation of the foetal linea alba. The deficiency is represented by amnion and peritoneum, usually fused, and in rare instances it may be very large, with wide separation of the recti muscles. Such a case is reported by Carrington Williams who describes a case of a negro child, seen two days after birth, in which there was a deficiency of the abdominal wall about three inches in diameter. The coils of intestine could be seen through the thin transparent membrane covering them, but there was no protrusion of the abdominal contents.

Intra-abdominal pressure tends to produce a hernial protrusion, especially if the abdominal wall is deficient over a wide area, resulting in the formation of an amniotic hernia. A very similar case was reported by Hipsley, in which the hernia was the size of the foetal head, and the measurements of the opening four and a

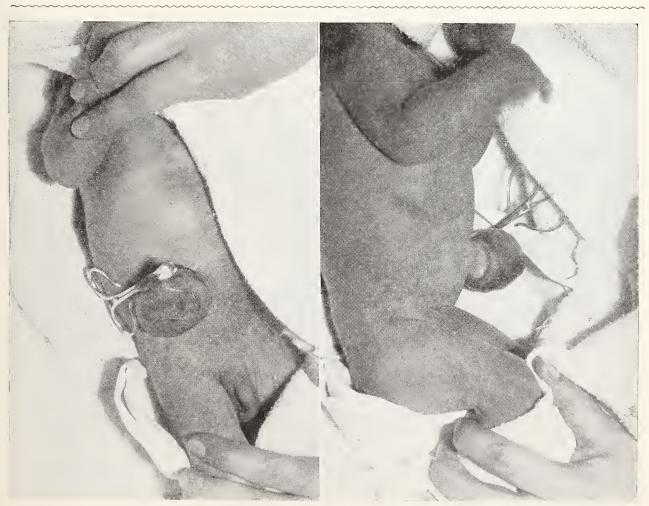


Fig. 1. Front view authors' case.

Fig. 2. Side view author's case.

half inches by two inches. In his case, the ligaments of the liver were attached to the interior of the sac, and had to be divided when this was removed. Such cases may be regarded as true herniae, as part—i.e., liver, stomach, and spleen-if not all of their contents must have been developed inside the intra-embryonic coelom, to be herniated later through the membrane covering the deficiency. That such protrusion can occur is proved by the case mentioned above, in which there was a large deficiency, but no protrusion, and by one described in a personal communication to Cullen by Dr. S. E. Sanderson, who saw a newly born infant in whom the anterior abdominal wall had failed to develop over a wide area; when he saw it, it was three days old, and intra-abdominal pressure had already produced a marked protrusion, which was steadily increasing in size.

Fraser, however, states that an error in closure of the foetal linea alba accompanies a marked degree of persistence of the extra-embryonic coelom, with retention within its cavity of coils of intestine. If this is so, large amniotic herniae, containing viscera other than intestine may well be the result of a combination of these two developmental errors; the contained intestine remaining in the cavity in which it develops, and such organs as the liver, stomach, and spleen, which develop within the abdomen and perhaps part of the intestine, being pushed forward by intra-abdominal pressure, thus enlarging the opening that is already present. In such a case this origin could only be established if one were to observe that the rotation of the intestinal loop had been arrested, or were able to recognise the attachment of the vitello-intestinal duct.

The treatment of all cases of congenital amniotic hernia is by immediate operation. It is reported in the literature that a newborn, full-term, vigorous child stands this severe operation very well at times, although the procedure must be adapted to the condition present.

The sac is opened and removed, together with a narrow strip of the margin of the opening in the abdominal wall. If any adhesions or a persistent vitello-intestinal duct prevent the removal of the sac from its contents, they must be divided. The possibility of the presence of a patent urachus must be borne in mind. After reduction of the contents of the sac, aided, if necessary, in the congenital type of hernia by enlargement of the umbilical

opening, the abdominal defect is closed. Hipsley, in one of the two cases he reported, was able to dissect out and suture the various layers of the abdominal wall; this may not be feasible, and, especially in small herniae, does not appear to be necessary, through-and-through silkworm-gut sutures being sufficient.

Unless one of the fatal complications has already occurred, no case should be regarded as hopeless, and operation should be urged. All untreated cases end fatally, and it is uncommon for those with a very large hernia, to survive operation. When operation is deferred for any length of time, the two main dangers are paralytic ileus and infection of the sac wall. In the case reported by Carrington Williams, operation was not undertaken until two days after birth, when the covering membrane had become yellow and opaque, due to the onset of infection. The infant died two days afterwards, and post-mortem examination established the presence of infection; positive cultures were obtained from the peritoneal cavity, the deep surface of the membrane, and the pericardium.

The case may be rendered almost hopeless by injury during delivery, and Hempel-Jorgenson reported two such cases in the same family. An umbilical hernia the size of a cocoa-nut was present in two robust boys born a year apart, of healthy parents. Both infants lived only a short time for the sacs ruptured during delivery. One of the father's sisters had a child born with a large spina bifida.

I have not found records of many cases in which operation has been undertaken immediately after birth. There was one case of hernia into the umbilical cord described by Reed, in which the cord had ruptured two inches from the umbilicus so that the bowel had escaped laterally. Conditions were filthy; the child was taken to hospital and operated upon two hours after birth. Recovery was uneventful.

Another very interesting case is described by Dr. W. M. Mills, of Topeka, Kansas. This was a white, male infant born the previous day, admitted to St. Francis Hospital, Topeka, Kansas, under the care of Drs. Golightly and Weidling, for the treatment of a congenital deformity of the umbilical region. A large hernial protrusion was found three inches in diameter, centrally situated, with the ligated cord hanging from the lower margin. The covering was identical with the outer layer of

the cord or membranes. The mass was expansile when the infant cried, but could be only partially reduced and did not transmit light. A gurgle was heard on pressure.

Operation was advised and performed immediately, under chloroform analgesia. circular incision was made through the skin just distal to the skin-membrane junction, and the sac opened. The contents were the entire liver, with the stomach and duodenum lying in the defect of the abdominal wall. The dome of the liver presented at the most prominent point of the sac, and the convex surface of the liver was adherent throughout so that it had to be freed by blunt dissection. The round ligament of the liver and the two hypogastric arteries were tied, and the umbilical cord was removed with the sac. Through and through interrupted sutures of chromic catgut were placed in the wall to close the defect and approximate the skin. A layer closure could not be made on account of lack of available tissue and lack of time necessary to do a plastic procedure. No drainage was employed. The infant had stood the procedure well at the end of the operation which lasted seventeen minutes.

Recovery was uneventful except for a slight purulent drainage from the incision and the child was dismissed on the seventh post-operative day.

Two months later he again operated this child for an incarcerated inguinal hernia, with recovery. Five years later he was again seen with an inguinal hernia on the other side. As it was causing no symptoms operation was not recommended at that time. The abdominal wall was firm at the site of the former operation.

Quantity versus quality. That is the issue on which socialization of medicine must be decided. Like dishonest vinters, the advocates of socialization propose watering the wine. This provides more to drink, but the draught is poorer. We must strive to maintain and improve quality, think quality, talk quality. The American public values its health. It wants a high standard of living and a high standard of medical care.—Detroit Medical News.

In all probability, nothing has given the average physician more headaches and done more to counteract his efforts to impress patients with the fact that after all medicine is not a mysterious thing, than the busy-body activities of food and diet faddists and the exploiters of products advertised as possessing omnipotent health-building and health-restoring powers.—Ohio State Medical Journal.

AGRANULOCYTOSIS*

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Agranulocytosis is the condition in which there is a marked reduction in the total number of white cells in the peripheral blood and a great decrease in the percentage of granular cells^{1, 2}. Granulocytopenia or granulopenia describes the condition more accurately^{1, 3}. It is the result of a disturbance of bone marrow function which interferes with the natural development and delivery of granulocytes to the circulating blood.

When Schultz³, in 1922, reported the condition in four middle aged women, he thought it to be a new entity. Most of the later observers, likewise, considered it an entity, but some, a m o n g them, Haden³ described it as a symptom complex resulting from a variety of conditions in which the bone marrow is affected. Schultz called this disease agranulocytosis. Because of the severe inflammation in the throat, Friedmann added angina to the original name in 1923. Other terms have been applied, ie: malignant and benign neutropenia; pernicious leukopenia; granulopenia, etc.^{2, 4, 3, 5}. In 1902, Brown¹, in this country, described a case of acute primary pharyngitis with extreme leukopenia, in which the white cell count was only 200 per cu. mm. other¹ scattered reports appeared in the literature prior to Schultzs'. It seems unlikely, however, that this condition could have existed to any extent prior to 1922 as blood counts have been a part of the facilities of the larger hospitals for the past fifty years2. Since Schultz's report a voluminous literature has accumulated. Fitzhugh⁴ states that more than six hundred cases were reported from this continent alone from 1931 to 1934 inclusive, and that the Bureau of Vital Statistics listed more than one thousand deaths from agranulocytosis in this country up to January, 1935. Since this date it seems to be decreasing rapidly. It is more common in adults, especially in the fourth and fifth decade. First reports seemed to indicate a predominence in women, but later figures reveal an almost equal distribution between sexes.

We have studied nine cases seen from 1931 to 1935 inclusive. Some of the details are given in the tables.

^{*}Presented before Southwest Clinical Society, Kansas City, Missouri, October 1936.

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		TABLE	I	
Case	Age	Sex	Outcome	Autopsy
1	22	F	Died	Yes
2	22	M.	Died	No
3	46	M.	Died	Yes
4	50	M.	Died	Yes
5	30	F.	Died	No
6	34	F.	Died	No
7	63	M.	Died	Yes
8	62	F.	Died	Yes
9	36	F.	Died	Yes

From the earliest studies it was evident that the causative agent must exert its effect on the bone marrow. Bacteria and chemicals have been most widely studied as possible causes. Benzol and arsenic compounds have been known to cause at times a severe depression of the bone marrow with leukopenia, but as a rule these substances affect all the elements of the bone marrow and produce a sever anemia as well. Not uncommonly, in sever or overwhelming infections, a marked reduction in the leukocytes occurs, but in agranulocytosis, the bacteria recovered from the local lesions or the blood stream have been a heterogenous horde. Nor has it been possible to produce agranulocytosis in experimental animals with any degree of consistency by means of bacteria or bacterial agents. Radiant energy, also, will produce a profound leukopenia, but it is seldom a factor in cases seen clinically. The most significant advance in solving the etiology of so called cryptic agranulocytosis has been the proof that certain commonly used drugs may specifically affect the myeloid tissues in susceptible individuals. Madison and Squier⁵, in 1933, reported fourteen cases which followed taking of amidopyrine, alone or in combination with barbiturates. Several of these patients were known to have had normal leukocyte counts or even a leukocytosis prior to the administration of amidopyrine. Subsequent to recovery, severe granulopenia again developed after single doses of amidopyrine in two cases. One of our cases (number three) developed six weeks after recovery from acute appendicitis; he was known to have a leukocytosis at that time. Evidence against amidopyrine has been submitted by numerous others. From the time of the report by Madison and Squier up to January 1935, one hundred forty-four cases were reported due to amidopyrine⁴. Kracke and Parker⁶ made a thorough review of this phase of the subject and gathered sufficient evidence to conclude that amidopyrine and related drugs are a most important, if not the most important etiologic agents in cryptic agranulocytosis. In the group of nine cases which we have studied, eight gave a definite history of taking amidopyrine preceding the Other drugs6 which have been incriminated include arsenobenzol, dinitrophenol, gold salts, quinine, orthoiodo-benzoate, the so-called benzamine group and neostiban. The great frequency of amidopyrine administration and the relative rarity of agranulocytosis points to a phenomenon of idiosyncrasy or abnormal suspectibility to the drug-the degree of which varies widely3, 4, 5. The mechanism remains unexplained — possibly allergic. Endocrine factors have been suggested. An accurate history of drugs taken prior to illness is frequently difficult to obtain.

Custer³ states that the gross description of the bone marrow hardly justifies the effort and is in no wise significant. Jackson¹⁰ states "the pathological changes in the bone marrow have been so diversely described that one is left utterly bewildered and this state of affairs is an opening wedge for those who maintain that agronulocytosis is not a disease but merely a symptom-complex." Fitzhugh and Krumbhaar9 showed that peripheral leukopenia does not necessarily depend upon marrow aplasia and reported autopsy studies which showed an abundance of myeloblastic elements but very few myelocytes and mature granulocytes. They attribute the condition to maturation arrest due to the lack of, or to the destruction of some specific factor which promotes maturation of the granulocytes. The other elements of the bone marrow were undisturbed. This view is supported by later and more extensive studies of Fitzhugh and Comroe9, 10, Jackson Parker^{7, 10} and Custer ⁸. In cases surviving for longer periods Jackson and Parker^{7, 10} found marked hypoplasia in some. Thus, it seems likely that the marrow findings vary somewhat with the stage of the disease, the extent of the damage and the effect of secondary factors. The bone marrow specimen from the six cases of our series which were autopsied were not prepared in such a way as to permit the use of special stains for the myeloid elements, and we are unable to report if the findings are characteristic.

Kracke and Roberts⁵ present the following scheme to describe the progression of the syndrome:

1. Onset in the bone marrow with failure of myelocytic function.

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- 2. Onset in the blood, after a few days, with reduction of granulocytes until they are greatly decreased or disappear.
- 3. Clinical onset with characteristic symptoms.
- 4. With loss of protection (leukocytic function) bacterial invasion occurs.
  - 5. Recovery or death.

The clinical description of Schultz remains classical: acute onset, prostration, fever, chills, gangrenous mucosal lesions and marked leukopenia. The weakness and prostration is a prominent symptom even in the early stages. All of the cases of our group were extremely weak, yet they preserved their mental alertness, even when moribund. The mucosal lesions are usually localized in the mouth, the pharynx and gums being common sites; however, they may appear in the nose, larynx, or any site along the gastro-intestinal tract where there are bacteria, uterus, vagina and rectum. The local lesions may be inflammatory with edema, and no ulceration, ulceromembranous or gangrenous. The appearance of the severe lesions in the mouth and throat may be indeed ominous: -ulcers with grayish necrotic bases or greenish blue membrane, marked edema and a lack of definite limits of surrounding inflammation. In a comparatively short time there may be extensive tissue destruction and sloughing. This may result in severe or fatal hemorrhage. The foul fetid odor is peculiar and unforgetable. There is commonly regional adenopathy, oc casionally marked edema, necrosis and sloughing of the overlying tissues. Severe and even fatal granulopenias have been reported in which there were no ulcerative lesions whatsoever; in others the mucosal lesions have been mild and insignificant. All the cases we studied had well defined oral mucosal lesions. In recurrences, especially, there is likely to be a great variation in symptoms and severity. All the evidence indicates that the local lesions are due to the loss of tissue defensive power resulting from the decrease in granular cells. Kracke and Roberts said, "We have evidence that the mere loss of granulocytes for seven days is incompatible with life." The local and general infection once established may be an important factor in the outcome though it is unlikely that it plays any part in the primary injury.

The course of the disease may be acute, sub-acute, remittent or chronic. Seven of our cases were of the acute variety, one was remittent and one chronic (Table II). In the acute cases the

fever is constant and the course is rapid ending in recovery or death in a few days or less. The first evidence of recovery is the increase in leukocyte count, increase in the granular cells and the appearance of young granular cells in the blood. Once on the road they may recover rapidly or may recover only to have a remission later. In the fatal cases the course is progressively downward and the leukocyte count progressively decreases; there may be an agonal increase in the count just before death. The local lesions may persist even after recovery and give rise to serious or fatal consequences; one (number 4) of our cases had a fatal hemorrhage due to erosion of an ulcer into a vessel of the larynx after the granulopenia had subsided; his count was 9,600 with fifty-two per cent granulopenia cells on the day of his death. The chronic cases are usually subject to symptoms of low grade invalidism.

	,	TABLE II	
	Amidopyrine	Location of	
Case	Prior to Onset	Ulcer	Course
1	Yes	Palate	Acute
2 3	Yes	Right tonsil	Acute
3	Yes	Gingiva	Acute
4	Yes	Gingiva, pha-	Remittent
		rynx and larynx	
5	Yes	Nasopharynx	Acute
6	Yes	Pharynx	Acute
7	Yes	Pharynx	Acute
8	Yes	Pharynx	Acute
9	No	Gingiva, pha-	Chronic
		rynx	

The characteristic and constant laboratory finding is the leukopenia and granulopenia (Table III). The total leukocyte count may vary widely. In fulminating cases it may be very low. The lowest count recorded in our group was 100 per cu. mm. with no granulocytes in the stained film. The percentage of proportion to the reduction of the total count. According to Schultz³, Jackson ¹⁰, and others, there should be little or no anemia or thrombopenia, and when there is, the condition is likely due to some other cause. Likewise there should be no immature granulocytes in smears of the peripheral blood. All our cases showed moderate decreases in red cell counts and hemoglobin. This does not seem inconsistent to us in the presence of marked myeloid involvement. Frequent repetition of the count is a valuable diagnostic procedure in doubtful cases and always valuable as a prognostic index. The sternal biopsy or puncture is advocated by some when there is difficulty in establishing a diagnosis. Other conditions as Banti's disease, aleukemic leukemia, pernicious anemia. and aplastic anemia may present identical blood picture at times, but usually, there are associated features as splenomegaly, lymphadenopathy, achlorhydria, glossitis, and severe anemia, etc., which serve to identify these conditions.

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	TABL	E III	
Case	R. B. C.	W. B. C.	Neutrophiles
1	3,460,000	650	16%
2	4,300,000	350	0%
3	3,660,000	300	1 %
4	4,310,000	2,950	10%
5	3,370,000	100	0%
6	3,820,000	600	20%
7	3,720,000	250	0%
8	3,990,000	450	3 %
9	4,180,000	1,200	5 %

Agranulocytosis is a grave condition. The combined statistics carry a death rate well over fifty per cent4, the general average about seventy-five per cent⁵, Jackson⁵, reported 103 cases treated with pentnucleotide and a mortality of only thirty-three per cent. All the nine cases in our group are dead. The fulminating cases are rapidly fatal. Recoveries may be expected in those which are more prolonged and milder. Some may succumb after several attacks (Case 9). Others may recover completely. The patient may die as a result of some complication sustained during the original attack. Patients do not often recover after the count falls below 1,0002. Many recover without active treatment. Recoveries and deaths are reported after all forms of treatment.

Due to the difficulty in dealing with the condition once it is established, prophylaxis is important. Amidopyrine should be avoided. Possible harm from such drugs as Arsphenamine, Arsenobenzol, benzol, dinitrophenol, etc., should be borne in mind. In the clinical cases all possible sources of chemical intoxication should be eliminated and codeine used as a sedative and analgesic4. Local care should be mild and conservative. Intelligent nursing care and adequate supply of fluids is important. Fluids should be administered parenterally if it is not possible to give adequate quantities by mouth. Transfusions may be of real value and most certainly should be used,3,4. Pentnucleotide¹⁰ has found more favor than any other single form of treatment, though there is no general agreement regarding its value⁷. Jackson, who introduced it, suggests that unfavorable results are due to insufficient dosage and to the fact that in such a fulminating disease, the patient may die before there has been time for

beneficial effects to accure. He recommends 40 cc. daily given in 10 cc. doses, intramuscularly. In some cases the reactions are so severe as to preclude its use or to restrict the dosage. We have had this experience. Case No. 9 was the only case in our group which was benefited by pentnucleotides.

Roentgen rays, liver extract, leucocyte cream and adenine sulphate have all been advocated. While we have had no experience with some of these forms of treatment, nothing that we have used has been beneficial. Fitzhugh⁴ concludes his remarks on treatment, "In a disease as serious as this, one hesitates to withhold any treatment which others have found helpful".

CONCLUSIONS

1. We have reviewed some of the more recent literature on agranulocytosis and presented a study of nine cases.

2. Eight of the nine cases had taken amidopyrine during the period immediately preced-

ing their illnesses.

3. No form of treatment was effective and all died from agranulocytosis or its complications.

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We should remember, always, that the real issue in the midst of all these social changes, is that of providing people with a living wage. Most of the economic questions that confront us today would be solved automatically if there was enough money in the majority of pay envelopes to permit people to pay their own way .-R. G. Leland, M.D., director, Bureau of Medical Economics, American Medical Association.

The future of mankind does not depend upon political or economic theory, nor yet upon measures of social amelioration, but upon the production of better minds in sounder bodies .- Prof. Earnest A. Hooten at Harvard Tercentenary.

POTENTIAL MALIGNANCY OF SMALL SKIN LESIONS*

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Public Health Reports issued October 18, 1935, record the fact on p. 1444 under the heading of "Provisional Summary of Mortality Statistics for the United States, 1932, 1933, and 1934", that in each of these years 2.6 persons per 100,000 population died of cancer of the skin. There were 11 deaths from all causes per 1000 population, or 1,100 per 100,000. Thus 2.6 divided by 1100 or about 1 in 440 of all deaths were due to malignant tumors arising in the skin. Over 3,000 deaths, therefore, resulted from cancer of the skin.

Picture these deaths by imagining the total population of Hiawatha or Olathe, Kansas, or of Carrollton or Liberty, Missouri, laid out on morgue slabs, as the one year's harvest! Not one of these deaths is necessary. They can all be prevented. In order to do so, one must recognize early any small lesions that are "potentially" malignant and one must cure them.

There are certain facts about cancer with which we are all familiar, and which suffice to prove that cancerousness is an inherent property of aberrant host cells.

- 1. All animals are subject to cancer. Cancers occur in human beings, rats, mice, dogs, cats, horses, and chickens. In each instance the cells of the cancer sufficiently resemble cells of the host so that one can, in general, on microscopic study, recognize what tissue they arise in.
- 2. These cells can be grown separately in tissue culture, be reinoculated into the host, and grow autonomously.
- 3. The cellular units of a cancer are capable of being transplanted within a host and grow in a new and distant location.
- 4. In the new location, they "breed true". They are exactly like those in the primary site.

These facts can be true only if a cancer is a growth of cells originating in the tissues of the host, and composed of cellular units which are singly able to proliferate and engender cancer colonies.

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Since cancer is composed of cellular units, it can be studied from the standpoint of an embryologist. One takes the smallest he can find, compares it with the next smallest and the next and the next, and arrives at an understanding of the course of development.

You and I have seen the following course of events: a tiny circular area of the epidermis makes itself apparent as different from the surrounding normal epidermis. It enlarges by centrifugal spread. It becomes scaly. The scale drops off or is picked off, but soon forms again. As it forms repeatedly the lesion slowly becomes thicker, and soon it bleeds when the scale is picked off. Shortly one can feel a definite discoid thickening of the skin in this spot. The margin is sharply demarcated. Central ulceration occurs. Growth becomes speedier. The sore becomes crateriform. It is crusted and ulcerative, secondarily infected, red, and, for the first time, painful. It enlarges and deepens. The lymph glands become involved. They are at first firm and solitary, soon big and fluctuant and matted together. They rupture through the superadjacent skin, and from sinuses with reddened and everted lips they discharge a bloody and stinking fluid. The patient becomes progressively weak and anemic, sick and malnourished, depressed and discouraged. He shortly is brought to his death by hemorrhage, bronchopneumonia or some other terminal and secondary occurrence.

That portion of this course of events which is least conspicuous is the most important. That is the earliest part, including the appearance of the initial epidermal area of abnormality, its progress into a scaling patch, and the progress of that patch into its earliest ulcerative stage. What has happened and why has it happened?

The course is continuous and straightforward¹. The microscopic examination of the superficial scaly areas reveals that they differ from normal only in the epidermal region. Here new cells different from the normal are seen growing in a sheet at the dermo-epidermal junction, and substituting themselves for the normal by insinuation between normal cells and by simply outgrowing them and pushing them upward to be cast off as corneous scale.

The new cells do grow faster than the normal, as is evidenced by the development of corneum in the form of scale at a greater rate than does the surrounding normal epithelium, and by the undergrowth of the normal seen in the illustrations presented. The fact that the

new cells differ from normal ones is evidenced by their cornification with retention of nuclei (parakeratosis), by their yellowish color in the gross lesion, by their comparatively large nuclei and differently tinted cytoplasm seen at high magnification in stained sections.

One must think in three dimensions. The layer of actively growing cells at the dermoepidermal junction is a sheet. Its faster proliferation than the normal cells results in its buckling and folding downward into the dermis, as may be seen in the photomicrographs. Such downgrowths are the earliest demonstrable anlagen of the characteristic downgrowths of squamous carcinoma. With continued proliferation the new cells form a colony that is gross and visible and can be felt. Their irregular growth and massing in clumps in the dermis results in local altered tissue nutrition, and eventuates in ulceration. It is not until ulceration occurs that there are any notable symptoms. Up until that phase, the scaly spot may itch a bit, or it may give rise to a feeling like a thorn in the skin when the finger is rubbed over it. When growth has progressed, eventually living cellular units from the primary lesion reach distant places such as lymph glands, where their continued proliferation results in the production of a gross colony of cancer, a metastasis.

Now the question, how does it all start? Why does a colony of new and different cells come into existence?

The epidermis is continually proliferating. Outer layers and corneum come by mitotic proliferation from the basal layer. This layer in an adult whose body area is some 1.5 sq. meters. is composed, allowing 25 square microns to the cell, of some 60 billion cells. I stained the corneum of several areas of my body with silver nitrate so that I could recognize these cells and know when they were replaced. I found that 7 to 11 days were necessary in different areas, and judged therefore that the thickness of the living cell layer renewed itself in this length of time. This layer is some 8 cell layers thick. Thus in 7 to 11 days, 8 layers arise from one layer; in round figures, the basal layer as a whole undergoes mitosis every day. Consider this total: 60 billion mitoses daily, over a period of many years!

I believe that in the course of so many reproductive events there may readily be believed to occur mutations. Just as mutations occur in germinal cells with a resultant altered indi-

vidual, so may, I believe, mutations occur in somatic cells, with a resultant colony of altered tissue units which may be cancer².

Thus cancer is seen to be a colony resultant from a mutation in which the mutant is viable. capable of growth at a rate exceeding that of the normal tissue, and growing thenceforward autonomously, parasitically, and with deleterious effect upon its culture medium, the host.

Somatic mutation is accepted by some biologists³. Mutation usually results in the loss of something. That which is lost in the cells considered here is responsiveness to growth control by the host. There is no reason I know of to deny the feasability of this explanation.

Mutants breed true. Cancer cells breed true. Mutants constitute a strain in which further mutation is often more frequent than in the parent strain. Something having gone wrong in the reproductive mechanism once, it is apparently more likely to in the future⁶. Thus may arise mixed baso-squamous lesions.

Mutations in a given species fall into certain fixed varieties of kinds. That is to say the reproductive mechanism goes wrong in certain likely ways, and in those ways only excepting in rare instances. Cancers of the skin also group themselves into certain classes.

Cancer is known to be incited by many agents. All these are known to be agents that affert the cells through their reproductive mechanism. They include sunlight, x-rays, arsenic, tar and its derivatives. It is postulated that these agents damage that gene or combination of genes which allows or enables cells to grow in an orderly fashion. Certain hydrocarbon substances chemically related to the estrogenic hormones do this especially well. Sunlight evokes cancer in blond persons and on their exposed areas partly by increasing the rate of proliferation, and hence the likelihood of mutation.

Cancer occurs at any age but is of greater frequency in older persons. The mutation theory explains this as being due simply to the greater opportunity for mutation to occur as time passes.

Some mutants have not much growth urge. They produce a small quantity or colony of cells, such as arsenical keratoses. The colony may dwindle and disappear⁴. Some reach an equilibrium with surrounding normal tissues and are manifested as lesions which progress to a certain point and remain thereafter unchanged for a long time. Others speedily outgrow the

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normal and constitute malignant lesions. Others, it is reasonably presumed, and these are probably in the vast majority as a matter of fact, do not get along well, are promptly overgrown by the normal, and never are seen at all.

Thus malignancy is dependent upon growth rate, upon in fact the ratio of new cell growth rate to normal cell growth rate⁵. Malignancy is capacity to do harm. Degrees of malignancy depend solely upon the rate of doing harm. If the ratio of new cell growth rate to old cell growth rate were 1:1 the lesion would be stationary. If it were 2:1, the colony would rapidly outgrow the normal, very rapidly indeed.

If a scaly lesion composed of new cells scales off every week, this means that it outgrows the normal epithelium which replaces its normal corneum each week. It outgrows it 2 to 1. It progressed by compound interest. A ratio of 1.1 to 1 would result in a visible lesion in the course of time. The lesion might progress so slowly that it would never harm the host. It requires about 100,000 epidermal cells to make a barely visible lesion on the skin 1 mm. in diameter and 10 cells thick. These could come from one normal cell in 10 days at a rate of one mitosis per cell per day. Thus the theory is wholly consonant with observations of rate of progress of the so called "keratoses", which I assert are colonies of blastomatous cells.

Neoplastic cells by this theory are cells lacking something associated with their reproduction. X-ray causes them to lack even more, and so to die; their greater vulnerability than normal cells when this agent is applied is consonant with the mutation theory.

No agents excepting destructive ones rid the host of these cells when they have come into existence. X-rays cure by killing them. Salves are wholly useless unless caustic. The actual cautery has been known to cure cancer for 5000 years. It is this agent which we choose in our practice.

A theory should lead to predictions if it is a true one. I will predict that no chemical or serum or anything else of that sort however introduced into the body will ever cure cancer, excepting that it does so by killing the component individual cancer cells or reinserting into them that gene chemical which they lack. The cure of cancer lies in amputating, by chemical, electromagnetic or physical means, the cells of which it is composed. No other manner of cure has ever worked or ever will. If x-rays will

separate cancer cells from normal somatic cells, well and good. Our experience has convinced us that the surest, safest, most fool-proof and therefore the best method of cure lies in the use of the actual cautery, excising the whole colony of cells by burning through normal tissue beyond the periphery of the tumor.

In summary, I insist that malignancy is not potential; it is there from the start or not there at all. "Cancer" does not connote a lesion that will eat one's head off in 3 weeks; it connotes a colony of cells derived from an altered mutant somatic cell, which may grow swiftly or slowly, or not at all. The "warts" are not warts; they are cancer from the start. They do not degenerate, they grow. They do not become malignant; their cells are malignant.

Maliganancy resides in the cellular units of the lesion. Given the presence of malignancy, then it is measured by their proliferative rate as compared with the proliferative rate of normal cells.

The mutation theory of the origin of cancer is eminently satisfactory philosophically, biologically, and practically. No better explanation of the cause of cancer will be evolved, I think, until the chemistry and physiology of chromosomes and their component genes is better understood. The will-o-the-wisp of a miraculously curative agent will have to go the way of wishful thinking. The cure of cancer lies in its early recognition and adequate treatment, preferably with the hot iron. Wide excision is the safest and most secure therapeutic measure, excepting lesions superficial enough to be blistered off without necessitating excision. The sooner we accept this fact and act accordingly, the sooner will 3000 people a year in the United States not die a wretched and unnecessary death.

SUMMARY

The human body may be thought of as a culture of proliferating cells, some of which undergo mitotic division frequently. Those of the basal layer of the epidermis reproduce throughout the lifetime at a rate of the order of once a day, implying some 60,000,000,000 individual cellular reproductive events daily in the skin of one human being. All the phenomena of cancer of the skin can be fitted consistnetly with the theory that cancer begins with one single aberrant mitosis, a mutation. The colony of progeny of the one altered cell constitutes a cancer.

The cautery excision of such colonies of cells is the best treatment.

Recognition and destruction of all small carcinomas of the skin would prevent 3000 deaths a year in the United States alone.

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ASEPTIC MENINGITIS FOLLOWING SPINAL ANESTHESIA

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Experimentally it has been shown by various workers that the injection of the various spinal anesthetic agents into the subarachnoid space, not only occasionally but almost routinely, produces degenerative and inflammatory changes in the central nervous system and its meninges. The work of Spielmeyer1, and Wossidlo2 years ago and of Davis et al3 more recently may be especially noted. Corresponding to these experimental findings as one peruses the literature on spinal anesthesia, there is noted a large number of nervous system complications following the use of various spinal anesthetic agents. The following enumeration of the more frequent complications will tend to call attention to these hazards and to suggest that the use of spinal anesthesia is probably best limited to those cases in which a special indication for its use exists or in which a special contraindication to other anesthetic agents is present. Certainly in most communities the majority of spinal anesthetic complications are not reported but the literature lists the following complications frequently:

Sudden death, intraoperatively or postoperatively.

Circulatory failure, intraoperatively or post-operatively.

Respiratory failure, intraoperatively or post-operatively.

Post-operative coronary thrombosis.

Post-operative headaches. The state of the s

Flaccid hemiplegia. Paraplegia. Optic atrophy. Abducens paralysis. Oculomotor paralysis. Bilateral complete ophthalmoplegia. Pyramidal syndrome. Trophoneuritic gangrene of extremity. Facial nerve paralysis. Auditory nerve paralysis. Hypoglossal nerve paralysis. Meningo-encephalitis. Myelitis. Intractable neuritis. Septic meningitis.

Aseptic meningitis.

Aseptic meningitis following spinal anesthesia has been demonstrated experimentally by various workers 1,2,3, and has been reported occasionally clinically. 4,5,6 A number of these cases have recovered after a few weeks, others have recovered with residual symptoms only after many months of illness, and others have progressed to death. The evidence supports the idea of a direct chemotoxic action of the anesthetic agent. I wish to report the following rather severe and persistent case which was resistant to all usual therapy but made a rapid and rather spectacular recovery after the use of intravenous typhoid vaccine fever reactions.

CASE REPORT

Mr. H. N., age 22 years, college student. The past history is negative. Because of an internal derangement of the knee joint, the patient was operated October 31, 1933, by a competent orthopedist for the removal of a cartilage from one knee. 175 mgm. of novocain was used as a spinal anesthetic. The patient made an uneventful recovery and left the hospital in five days. However, within a few days after the operation he began to have headaches to which he was not accustomed. These headaches became quite persistent and of increasing severity, associated with a slight fever, causing the patient to come in for a medical examination on January 17, 1934. The only objective findings at this time were a temperature of 99.6° and a pulse rate of 96. The chief subjective symptom was the daily and persistent headache. The following laboratory findings were determined. urine negative: hemoglobin 89 %; red count 5,240,000; white count 11.200; Wassermann negative; Malta fever negative; Widal negative; blood culture negative; Von Pirquet negative; chest x-ray

negative; skull x-ray negative; knee x-ray negative; eyegrounds negative.

The headaches and daily fever persisting, the patient was sent into the hospital and a spinal fluid examination revealed the following findings: pressure definitely increased; cell count 380; 84% lymphocytes; globulin 1 plus; sugar 40 mgms; colloidal gold 0111121-000; Wassermann negative; negative for tuberculosis on stained smear and guinea pig inoculation; sterile on smears and repeated cultures.

In the hospital the headaches became more severe, the temperature reached 100° to 102° each day, the spinal fluid cell count varied between 400 and 730, rigidity of the neck developed, rather frequent vomiting occurred and the patient lost considerable weight and strength. On March 4 the patient began to show a definite motor aphasia and recurring attacks of a Jacksonian type of twitching in the right side of the face, right arm, and right leg, indicative of encephalitic cortical irritation. Then frequent spinal tappings were begun and carried out for several weeks without any improvement. These were then discontinued but the patient continued to grow worse and his condition becoming rather critical, it was decidede to try an intravenous typhoid vaccine fever reaction. On April 4 he was given 50 million typhoid bacilli intravenously which was followed by a chill and temperature of 103°. There was a definite clinical improvement both subjectively and objectively within twenty-four hours. On April 7, 100 million typhoid bacilli were given intravenously followed by a chill and temperature of 103°, and 150 million were given April 10 followed by a chill and temperature of 102°. The improvement that set in within twenty-four hours after the first typhoid reaction continued, the temperature came to normal, the meningeal and encephalitic symptoms promptly subsided, the cell count dropped to 68, and the patient was discharged May 18 feeling quite well. He has remained entirely well since then with no sequelae of any kind.

SUMMARY

A case of severe prolonged aseptic meningitis following spinal anesthesia is reported which resisted all other treatment and recovered rapidly after intravenous typhoid vaccine fever reactions.

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RECURRING INGUINAL HERNIA

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During the past five years 2,586 operations for hernia were performed. Among this number, 164 or 6.3 per cent were recurrent inguinal herniae. In the reporting of these inguinal herniae which have recurred, we are including all herniae which had previously been repaired irrespective of the length of time which had existed between the former repair and the recurrence. It may be that a hernia which does not recur until after one year is a new hernia. However, we have included all herniae previously repaired as recurrent herniae in this report.

The recurrent hernia is invariably associated with a weakened, atrophied or poorly developed internal oblique muscle or a weakened, partially destroyed Pouparts ligament. It may be a congenital poor development or it may be the result of injury to the nerve supply at a previous operation. It may be from injury to tissues from previous too tight suturing or from infection at the site of the previous hernioplasty.

No new or special procedure is required for the repair of the usual hernia. In every case, however, every bit of available tissue is made use of in the repair. The old scar is excised. The aponeurosis of the external oblique muscle is exposed, starting at the upper end of the incision which extends into normal tissue and working downward toward the external ring. Particular care is given to the ilio-inguinal and iliohypogastric nerves which are more easily damaged in the recurrent hernia than in one not previously repaired.

The cord is then isolated and held to one side with a rubber drainage tube used as a tape. If the sac is indirect, it is ligated as high as possible and the sac is removed. The suture ligating the sac is carried up underneath the

^{1.} Spielmeyer, W.: Veränderungen des Nervensystems nach Stovain-anästhesie, München. med. Wchnschr. 55:1629-1634,

transversalis and internal oblique muscles to a point one inch above the internal ring, brought out and tied. If there is a direct sac, it is opened and sutured if it is long and thin and protruding. If only a small bulge is present, a purse string of plain catgut is inserted and the redundant portion inverted as the purse string is pulled tight and tied. This latter method is the practice in the majority of direct sacs.

The conjoined tendon is then sutured with interrupted sutures of silk to Poupart's ligament. The first suture is placed through the muscle fibers of the transversalis and internal oblique muscles at a level with the upper margin of the internal inguinal ring or slightly above. The needle is then carried beneath the cord and through Poupart's ligament at a level which is determined by the individual case. The attempt is made to form a sphincter-like arrangement of the muscle fibers of the transversalis and internal oblique muscles about the cord. By placing this first suture high the muscle is drawn down in the direction of its greatest elasticity so that less difficulty is experienced in bringing the conjoined tendon to Poupart's ligament with the following sutures. No sutures are placed above the internal ring as we believe they are not needed and that the sutures do more damage than good. The normal elastic muscle tissue is of more value than atrophied muscle and scar tissue. Seven or eight interrupted silk sutures are used to bring the conjoined tendon securely and firmly to Poupart's.

The external oblique aponeurosis is closed with silk sutures. The method of closure depends upon the individual hernia. In the indirect sac with satisfactory closure of the conjoined tendon to Poupart's, the cord is displaced as far medially as possible and the medial flap of the external oblique is brought over it and sutured to the cut edge of Poupart's ligament. The suture not only picks up the edge of Poupart's ligament but also a small bit of the conjoined tendon between the silk sutures at each bite as far down as it is possible to do so without constricting the cord at the newly formed external inguinal ring.

When a direct sac is present many herniae appear more securely repaired if the medial flap of the external oblique aponeurosis is brought under the cord and sutured. A flap of the sheath of the rectus abdominalis muscle may be turned over if the muscles appear unduly weakened.

In repairing recurrent inguinal hernia there is no set rule which can be followed but that method of repair should be adopted which appears to give the soundest repair in each individual case. The most difficult recurrent hernia to repair is that occasionally seen in which there has been a more or less complete loss of Poupart's ligament. This may result from too tight suturing with sloughing. It is more commonly the result of infection in the previous hernioplasty with sloughing of Poupart's ligament. In such a patient upon examination there is a bulge in the inguinal and femoral canals. In fact there appears to be a combined femoral and direct inguinal sac. This condition is more common in the patient who has had several repairs of the hernia.

It is hopeless to expect a cure by suturing the weakened tissues present. For such cases the following technique is used. The usual herniotomy incision is made and the weakened tissues exposed ready for suturing as in the normal case. An incision is then made over the lateral aspect of the thigh starting two inches below the crest of the ilium and extending downward a distance of seven or eight inches. The tensor fascia lata muscle with its investing fascia lata sheath is exposed. Having determined the size of the fascia lata flap which is thought necessary and allowing an extra inch for good measure, the flap is raised. The superior gluteal artery and the nerve penetrate the tensor fascia lata muscle from behind so that care must be used in preserving these. A paralyzed muscle is of little value. The nerve and vessels will allow considerable stretching without impairing function. To lessen the pull on the blood vessels and nerve, the tensor fascia muscle is passed below the sartorius muscle, the sartorius muscle being separated from the rectus femoris a distance of three inches at its proximal end. The sartorius has a double innervation, and the proximal one penerates the muscle from behind about three inches below its origin. Care must be used to prevent injury to this nerve.

The tensor fascia lata muscle with its continuation of fascia lata is drawn down parallel with Poupart's ligament. Sutures are then placed catching a bite of the internal oblique muscle above the level of the internal ring, remnants of Poupart's ligament and the edge and under surface of the sheath of the tensor fascia lata muscle. Below the level of the iliac vessels little remains of Poupart's ligament or Gimbernat's ligament, and some structure must

be anchored there to prevent recurrence of a direct bulge into the femoral region. The muscle fibers of the tensor fascia lata muscle seldom reach below a level of the internal ring when transplanted, so that its continuation which is fascia lata, is used to close this defect. In one case I attempted to bring the fascia lata under the remaining fibers of Poupart's ligament, suturing it to the periosteum of the superior ramus of the pubis and to the pectineus fascia. There was too much pressure on the femoral vein, producing a temporary cyanosis of the lower extremity. It is much better to bring the fascia lata over the remaining fibers of Poupart's ligament suturing it with moderate tension to the periosteum of the superior ramus of the pubis and to the origin of the pectineus muscle. The sutures used here are interrupted silk. It is necessary to use only moderate tension on the fascia lata as we are not dealing with inelastic tissue but with a live muscle capable of a strong elastic muscle pull.

After the fascia lata is sutured to the superior ramus of the pubis, its continuation is sutured beneath the internal sheath of the rectus abdominalis muscle. The sutures are continued from the superior ramus of the pubis medially and upward beneath the rectus abdominalis muscle as far as is possible. The conjoined tendon is then sutured to the newly constructed Poupart's ligament with interrupted silk sutures. The sutures pass through the fascia lata pick up the remnants of the old Poupart's ligament and out again, closing the inguinal canal as in a usual hernia repair. The cord is then replaced in the canal. The medial flap of the external oblique aponeurosis is then brought down so that it overlaps the tensor fascia lata muscle and is sutured to it with interrupted silk sutures. This forms a sound, firm wall from live tissue with its own blood supply and gives greater support than other methods which have been advocated.

The remainder of the operation is completed with the usual hernioplasty technique. The defect in the fascia lata cannot be closed usually as the flap taken is so wide that the edges cannot be brought together. The subcutaneous tissues are sutured with plain catgut and the skin is closed as in incisions elsewhere. The patient is kept in bed for fourteen days but is encouraged to move about in bed.

I am not advocating this operation for the usual recurrent hernia but for the unusual recurrent hernia occasionally encountered in

which there is little of Poupart's or other tissues for a satisfactory repair. It is suitable for the recurring hernia in which a repair cannot satisfactorily be made with the tissues found in the inguinal region.

Case 1. No. 39980. The patient was a man, 45 years old, who was admitted to the U.S. Marine Hospital, Staten Island, N. Y., on April 29, 1932, for the repair of a recurrent left inguinal hernia. The left inguinal hernia had first been repaired in a hospital in California in August, 1931. It recurred three months later and he was operated upon again in December, 1931. The hernia again recurred shortly after leaving the hospital. He was operated upon at this hospital May 2, 1932. At the time of operation a direct sac two inches in length was found. Very little of Poupart's ligament could be found. The tensor fascia lata muscle with the fascia lata was transferred to reconstruct Poupart's ligament and was continued and sutured beneath the rectus abdominalis muscle. Recovery was uneventful and he was discharged from the hospital May 20, 1932.

Cose 2. No. 47158. This patient was a man, 48 years old, who was admitted on May 10, 1934, for repair of a recurrent right inguinal hernia. He stated that he was first operated upon in a New York Hospital for hernia repair in July, 1933. Four months later the hernia recurred. He was operated upon again at this hospital on May 11, 1934. At that time there was a direct bulge and a protrusion into the femoral region with loss of Poupart's ligament, so that a satisfactory repair was impossible without the transfer of some other tissue. The tensor fascia lata muscle was transferred to reconstruct the Poupart's ligament. Recovery was uneventful and he was discharged May 29, 1934.

Case 3. No. 47710. This patient was a man, 52 years old, who was admitted on July 2, 1934, for the repair of a recurrent right inguinal hernia. He stated that he had first been operated upon for hernia repair in 1932. Two months later the hernia recurred. He was operated on July 6, 1934. At the time of operation a direct sac was found and a bulge into the femoral canal. There were adhesions between the intestines and the parietal peritoneum in this area. There was little of Poupart's

ligament found. The tensor fascia lata muscle was transferred to the inguinal region for reconstruction of Poupart's ligament. Recovery was uneventful and he was discharged July 26, 1934.

Case 4. No. 49795. The patient was a man, 47 years old, who was admitted for repair of a recurrent left inguinal hernia on February 14, 1935. He was first operated upon for repair of the hernia in 1932. The hernia recurred in May, 1934. The hernia was reoperated in July, 1934 but recurred. He was operated February 18, 1935, at which time a direct sac and a femoral sac was found with little evidence of Poupart's ligament. A transfer of the tensor fascia lata muscle was done and Poupart's ligament reconstructed. The fascia lata was continued across the inguinal region and sutured beneath the rectus abdominalis muscle. Recovery was uneventful and he was discharged March 8, 1935.

All of these patients were closely followed postoperatively. Examinations were made at intervals of approximately thirty days after leaving the hospital until they were able to return to work. Follow-up reports at intervals of three months, six months and one year have been obtained. The herniae have remained sound. The period of disability is somewhat increased over the usual hernioplasty. The patients have complained of some discomfort in the operative area for an average period of approximately three months. This is apparently caused by the tension of the tensor fascia lata muscle, and to some extent due to the loss of the larger part of the fascia lata from the operated thigh. It is felt that the longer period of discomfort and disability is fully compensated for by the satisfactory hernia repair which is obtained by this method.

In this group of patients it is noted that 53 per cent were in those past forty years of age. This would suggest that in many instances the weakened condition of the internal oblique muscle is a part of the general weakness of the abdominal muscles so often seen in people past forty. This is more common in that group of people who eat well and exercise little. It is also very common in the laboring type of individual. particularly in those who show signs of some malnutrition. The average patient past forty with a recurrent hernia and with a sagging abdominal musculature should be told be-

forehand that his hernia will be more difficult to cure and the possibility of recurrence somewhat greater than in a younger individual with firm muscles.

The cause of recurrence may, therefore, be divided into two groups. First—the patient's age and muscular development and the size and type of the hernia. The second cause is the result of errors in technique, choice of method of repair and the after treatment. The surgeon can do little to alter the first. The second cause, however, he must prevent. Asepsis is the most important. Hemostasis must be complete. The knots of the suture material must be firmly tied. Injury to nerves must be avoided. The inguinal sac, if indirect, must be ligated high and transplanted. All available tissue must be used in the repair.

The age at which recurrence occurred in this group was as follows:

20 to	30)	1	4	percent
30 to	40		3	3	percent
40 to	50		3	6	percent
50 to	60		1	. 5	percent
					percent
Above	70			1	case

In this group of patients the average length of time between the previous repair and the recurrence was 6.2 years. This is a much greater period of time than is given in the usual series of reported cases. In this group 8 percent had been repaired more than 20 years previously; 24 percent more than 10 years previously; only 22 percent had recurred within a few months or less than one year after operation. 46 percent, therefore, or nearly half recurred after one year and before ten years.

How do we account for the difference between these statistics and many formerly published? It is largely due to the following:— These cases have all been repaired since the onset of the depression. Many, if not the majority of the patients with these recurrent hernias have been examined and turned down by a doctor employed by various industrial organizations. Before the depression the doctor usually passed everyone who did not have a well developed hernia. In fact, some were passed who for years had hernias. Since the onset of the depression the examinations have become much more rigid, until for the past two years a man with a slightly enlarged ring or a very slight impulse with the finger inside the external ring, was immediately turned down. He was forced either to have this large ring repaired or seek other types of work. In normal times he might have obtained work elsewhere. In these times it is difficult for him to obtain work in the field in which he is experienced. He, therefore, usually chooses to have an operation which is otherwise unnecessary in order that he and his family may be self supporting.

Let me illustrate this again. Last year we repaired 760 hernias. This was 242 percent more than was operated upon at this hospital four years ago. Are hernias on the increase to such an extent as these figures indicate? Not at all. It is the result largely of the rigid examinations given employees since the onset of the depression.

Many of these so called hernias were not disabling and probably never would be. Before operation we explain to the patient that we really cannot find a hernia and we think he is able to work, but if he is positive that he cannot get work with the moderately enlarged inguinal rings which he has, and he still requests an operation, that we will do it for him. A few who had inguinal rings so small that we could not get the examining finger inside the external inguinal ring, we have sent out of the hospital and advised them to seek work of a similar nature with a different company. Many of these patients with recurrent hernias who had worked for ten or twenty years without pain or other symptoms were forced to have another repair because of some slight direct impulse found by the examining doctor or by his feeling that the existing weakness made this man a poor industrial risk. A clear knowledge as regards the potentiality for inguinal hernia is necessary for medical examiners of industrial employees. A man with a large external ring may not develop a hernia after years of manual labor.

The above I believe accounts for the difference in the statistics between those previously reported and those given in this article.

In these patients with a recurrence of the hernia, 16 per cent were my own cases which had formerly been repaired by a modified Bassini technique. 6 per cent had been operated in foreign countries. 6 per cent had been operated in other New York hospitals. In 4 per cent the records did not give the hospital. In 68 per cent the previous operation had been done in various hospitals throughout the United States.

In eight cases there was no evidence that anything more had been done than ligation of an

indirect sac. In one case apparently the external ring alone had been sutured. Six had apparently been repaired by the Ferguson method. The remainder so far as could be determined had been repaired by the Bassini method or its modification.

The suture material formerly used had been absorbable except in eleven cases. One, operated abroad, had been closed with silver wire. In the other ten, silk or linen sutures were found partially holding the conjoined tendon to Poupart's ligament.

In the follow up letter to patients, they are requested to furnish certain data and if possible to report for further examination. Relatively few avail themselves of this examination. About 34 per cent reply by letter, but it is difficult by letter to determine the number of recurrences unless the patient states he has been examined by a doctor who found such and such to be the case. The patient's own statement is of relatively little value in determining the condition of the hernia repair.

Of these 164 recurrent hernias, 77 per cent had been repaired once before. 13 per cent had been repaired twice previously, 7 per cent had been repaired three times, and 3 per cent had been repaired four times.

The more frequent the previous operations, the greater is the difficulty in obtaining a sound inguinal repair. There is a difference of opinion among operators as to the proper suture material for repair of a hernia. Formerly chromic catgut was used for the repair of all hernias. For the past fifteen months interrupted silk sutures have been used to suture the conjoined tendon to Poupart's ligament. There seems to be sufficient evidence to warrant the use of silk sutures particularly in recurrent hernias.

SUMMARY

One hundred sixty four recurrent herniae are reported which have been operated upon during the past five years. Four of these required a reconstruction of Poupart's ligament before satisfactory repair could be done.

There has been a marked increase in the number of herniae operated upon during the past five years. This increase is largely due to the more rigid medical examinations of employees brought about by the depression.

The tensor fascia lata muscle with its enveloping fascia lata is used as a pedicled transplant in the unusual difficult recurrent herniae

(Continued on page 126)

PRESIDENT'S PAGE

To All Members of The Kansas Medical Society:

The Social Security Act represents an opportunity. It affords in many ways, a chance for medicine to meet an emergency which has arisen without warning and which must be faced at this time.

- 1. Our obligation is to care for the sick and to go more than half way in any negotiations with civil authorities toward that end.
- 2. This should be done amicably with avoidance of unnecessary publicity—for otherwise all of the interests unfavorable to the medical profession immediately take advantage of a situation of that kind to further ends detrimental to the practice of medicine.
- 3. The benefits to be gained by cooperation of this sort are obvious:
 - a. By immunization the lives of many innocents are saved.
 - b. By being alert to our opportunity for giving attendance to indigent persons, we shorten periods of disability, and save time, suffering and many lives. In other words it is much easier to plug a sand hole than to replace a levee when the flood has broken through.

A Social Security Act measure will probably be enacted in Kansas during the near future. The medical profession has been consulted in this regard from the standpoint of public health and medical features and every effort has been given by your Committee on Public Policy, officers, and Executive Secretary to eliminate objectionable procedures and conditions. We request a studious consideration of the bill to be enacted by every member of The Kansas Medical Society and request your advice therein through direct communication with the central office.

H. L. SNYDER, M.D., President.

EDITORIAL

THE ANSWER

Physicians are prone to criticize state legislative bodies for lack of intelligent interest in such problems as legal qualifications for those engaging in the healing arts and other matters in which both they and the public have a joint interest. It would be most illuminating if these critics underwent a cross examination along this line.

- Q. Do you read the bulletins sent from the office of the Executive Secretary?
- Q. Do you write promptly when information is asked regarding some local matter?
- Q. Do you when requested write letters or contact a candidate to ascertain his attitude on these questions?
- Q. Do you take a little time during your daily round to educate the public on medical matters that affect the community?

As far as we can ascertain the answer is no in eighty per cent of those examined so the solution of these problems rests not in the lap of the gods but under the feet of a somewhat apathetic profession.—W.M.M.

HEALTH COLUMNS

The public is fond of reading medicine. Medical discoveries are front page news, usually to the embarrassment of the scientists who make the discoveries and to the entire medical profession. The public likes the health columns. Medical advertisements in the newspapers and magazines are eagerly read. The average "slick" magazine carries a large amount of advertising space devoted to medical appliances, drugs and foods represented as necessary to the cure of disease and maintenance of health. People dwell upon this sort of reading matter. A few are credulous enough to ask their physician about the authenticity of reports of discoveries which interest them. Some will copy the names

of drugs that are advertised and seek professional advice before trying them. But the majority of people go blindly believing what they read, treating their supposed maladies without the direction of a physician.

A recent example of this is a newspaper reported specific drug for a certain variety of headache, appearing in a widely syndicated health column. There is no doubt that the physician who is responsible for the material published under his name has access to authentic medical knowledge. He quotes, in this particular instance, his authority for the statement that a certain drug is specific for a certain kind of headache. The drug is ergotamine tartrate. There can be no doubt that this is an effective form of ergot. But ergot is a dangerous drug when taken in any way excepting on the advice of a physician.

It might be well to recall a recommendation, by the same columnist, of another drug which was thought by him to be a great boon to persons who wished to reduce their weight. Reading of the drug, a few consulted their physician and took it under supervision. Many people lost their lives taking it without medical advice.

The quest for medical knowledge is legitimate. The public has a right to the facts concerning health and disease. Moreover health education is a fundamental necessity. It is of the utmost importance that such knowledge be disseminated to reach the entire population. The press, radio, pamphlets, posters and public speakers should be used for this purpose in order that health education may reach every man, woman and child in the land. The public cannot receive this kind of instruction through the publicity facilities of organized medicine. Such a program of education should be nationalized and conducted by an agency such as the Public Health Service. Newspaper and magazine publishers and radio broadcasting companies are primarily interested in advertising. The printed material and the broadcasts are to interest people so that they will read and listen to advertising. Advertisers of merchandise can not be expected to conduct without any leadership a national program of health education. It is not their field. The influence of the medical profession should be toward an organized and sustained plan of health publicity. It is only through such methods that faulty advice and vicious practices and wide spread ignorance on matters of health can be discredited and rendered unpopular in the minds of the people.—R.B.S.

CAMPAIGN AGAINST SYPHILIS

Surgeon-General Thomas Parran of the United States Public Health Service is receiving a whole hearted support from the public and the medical profession in his campaign against venereal disease. Syphilis eradication is the goal that is set and the undertaking will doubtless be more effective than either of the similar battles against tuberculosis and cancer.

The first objective is to educate the people and the press to speak openly of syphilis as a public health menace that must be fought openly. This has already been largely accomplished with the press of the country laying aside its taboo against the use of the word syphilis. Doubtless before many months the broadcasting companies will overcome their present squeamishness in this regard which however allows the air to be laden with advice about the care of the bowels.

Lay education will proceed rapidly and present plans call for full cooperation with medical advisory groups planning the treatment phases of the campaign. Dr. Parran who for ten years was chief of the Division of Venereal Diseases of the United States Public Health Service has contributed widely on the subject in both lay publications and official bulletins. There are now ample funds allocated, some eight million dollars for the current year, through the Social Security Act for the aid of state and local health service. A very considerable part of this will go to the campaign against syphilis.

This government sponsored campaign working through the state board of health, county and city health departments, providing as it does for widespread educational propaganda should accomplish much more than our former sporadic efforts. We pledge the support of the medical profession as long as the campaign is conducted along the lines announced.—W.M.M.

BASIC SCIENCE LAW

The Kansas City Times supports the basic science measure now before the Kansas legislature in an editorial entitled "Science and Quackery", appearing in the issue of March second.

The editorial concludes: "The basic science proposal is sound and eventually should be applied to all persons who would practice the healing art in the state, excepting only those whose approach is purely religious. The immediate attack on quackery is a sound and valuable beginning".

This editorial point of view expressed by a newspaper so popular throughout the state of Kansas should be encouraging to the many friends and supporters of the bill as it was presented.

The politicians whose timidity causes them to side step the question for the time being may yet find that the demand for a thoro going basic science law may become so popular that it will be a vote getter.—R.B.S.

ARGUMENTS FOR HEALTH INSURANCE

THE INSIDE DOPE

Foreman (to small son working who has met with an accident)—When will your dad be fit for work again?

Boy—Can't say for certain, but it won't be for a long time.

Foreman—What makes you think that?

Boy—'Cause compensation's set in.—Montreal Star.

MAC CAHAL LEAVES WICHITA

Sedgwick County Medical Society has been honored by the recent appointment of its executive secretary, Mac Cahal, to the executive secretaryship of the American College of Radiology.

Mac has rendered Sedgwick County Medical Society and the Kansas medical profession as a whole, numerous and efficient services. He has in fact distinguished himself as one of the best medical secretaries in the country. His many friends in Kansas dislike having him leave his native state but they are nevertheless happy to see him advance in medical organization.

Mac will leave Wichita on approximately April 1 to assume his new work in Chicago. We extend our well wishes for his continued success.—C.G.M.

ANESTHESIA AND THE ANESTHETIST

Hospital Management is devoting a column each month for consultant service on anesthesia and its allied problems, which is available to all workers in this field. The answers to questions submitted will appear in their columns.

Beginning with the January, 1937, number a department will be devoted to the subject of anesthesia. This particular feature of Hospital Management affords questions and answers on the various problems of anesthesia and anesthetics, and is very timely. To a large extent the answers given to the questions will meet with favorable approval, but some of the answers are open to debate, which is to be expected.

One of the questions was in regard to responsibility when a nurse anesthetist is giving the anesthetic. The Supreme Court of California issued a ruling that a nurse anesthetist in that state is not practicing medicine because she is working under the direction of the physician who is operating upon the patient. The responsibility is up to the operator.

On two different occasions the statement has been made by Hospital Management that gas anesthesia is less expensive than either. We are of the opinion that this statement is not correct, based upon the requests of numerous hospitals for the staff to use ether in preference to nitrous oxide in obstetrics or in any operations on account of the difference in cost.

Another answer that is open to criticism is in regard to who selects the anesthetic for the individual patient, the operator or the anesthetist. The less experienced surgeon will try to "pass the buck" to the anesthetist, and often wisely so; but the competent operator will much prefer designating the anesthetic himself. On the other hand, when a question or doubt arises, the surgeon and the anesthetist should consult as to the anesthetic of choice. Should the two fail to agree, undoubtedly the surgeon has the final decision, which should be accepted.—The Pennsylvania Medical Journal, January 1937.

TUBERCULOSIS ABSTRACTS

A review for physicians prepared monthly by the National Tuberculosis Association and published through the co-operation of the Kansas Tuberculosis and Health Association and The Kansas Medical Society.

THE SIGNIFICANCE OF A POSITIVE TUBERCULIN REACTION

A positive tuberculin test, particularly in the period of childhood or adolescence, places before the family physician the difficult task of carefully following a few of the knotty threads which help to make up the complicated fabric of human life.

He must realize that a positive reaction means that the tubercle bacillus has entered the human organism and has produced a pathological condition known as tubercle. In reality, a positive test warrants a diagnosis of tuberculosis. It is doubtful if we are justified in continuing to teach that there is a difference between disease which does not produce obvious symptoms and which never manifests demonstrable pathological changes during life, and the same disease which gives rise to the symptoms of toxemia with the demonstrable signs of gross pathology.

POSSIBILITIES FOLLOWING INFECTION

Infection with the tubercle bacillus carries a wide range of possibilities. The disease may

never cause obvious symptoms or demonstrable pathology. It may, particularly in infancy, lead to the development of one of the acute forms of tuberculosis which usually, in a relatively short time, prove fatal. Generalized miliary tuberculosis, tuberculous meningitis and the acute pneumonic types of pulmonary tuberculosis are among the common forms. If the child with a positive tuberculin test lives to be three or four years of age without developing manifest progressive disease, even though the x-ray may show what we call the primary complex (a calcified or Ghon tubercle in the parenchyma of the lung with secondary involvement of tracheobronchial lymph nodes), we may reasonably anticipate that he will carry on through childhood without clinical manifestations of disease.

When he arrives at the age of puberty there seems to be an inexplicable susceptibility to active progressive disease either through endogenous or exogenous reinfection. Then follows the train of variable possibilities always accompanying manifest tuberculosis.

Time will not permit a detailed discussion of these possibilities. Suffice it to say that the individual with a positive tuberculin test faces all the possibilities inherent in the wide range of hematogenous clinicopathological manifestations from the relatively inert primary complex through mild, moderately severe, to overwhelming generalized tuberculosis: and from low-grade fibrotic bronchogenic lung lesions through progressive stages of caseo-ulcerative forms, to widespread bilateral multilobar involvement which so often precedes death.

PHYSICIAN'S RESPONSIBILITY

What has been said emphasizes the grave responsibilities resting upon the family physician when he stands in the presence of a child exhibiting a positive tuberculin test. Obviously he must throw about such an individual every available safeguard.

A positive tuberculin test has other implications and places upon the family physician other obligations. Having discharged his duty with reference to the individual manifesting the evidence of infection, he must consider the probable source of infection. Infection with the tubercle bacillus means contact with the tubercle bacillus. This usually means intimate contact with some one who has open tuberculosis. Naturally some one in the home must be considered the most probable source of infection.

A negative family history is of little importance. Each member of the family, including relatives, servants and others who may reside in the home, should have a tuberculin test; and every one exhibiting a positive test should have a thorough examination, including an acceptable x-ray of the chest. Any member of the household manifesting symptoms or signs of pulmonary disease should be examined even though the tuberculin test is negative. Repeated sputum examinations should be made in suspected cases where sputum is available. Accepting a single negative sputum examination as final often leads to disaster.

DETERMINE SOURCE OF CONTACT

If such a searching investigation fails to reveal the source of infection in the home, we must consider the possibility of contact with tuberculous teachers, neighbors, or visiting friends and relatives. Finally, hand to mouth infection must be considered. The baby on the floor, the child playing jacks or marbles on the street, may easily make contact with tubercle bacilli which have been deposited there by someone suffering from open tuberculosis. Occupants of the home may carry tubercle bacilli on their feet or they may be carried in by dogs and cats. Contaminated food may constitute another source of hand to mouth infection.

Thanks to those who have instituted the wise handling of dairy herds in this country, and the added precaution of pasteurization of milk before delivery, we see relatively little bovine tuberculosis in the United States. However, we must not forget the possibility of infection from undiscovered tuberculous cows privately owned or in dairy hards.

We must admit that the execution of the proposed program is often difficult. Nevertheless, the obligation rests squarely upon the shoulders of the physician who discovers a positive tuberculin test. Fortunately for those physicians who may not be interested, or who may not desire to carry out such a program, the aid of specialists or voluntary and public health may not desire to carry out such a program, the agencies in the field of tuberculosis may be secured. The same sources of service may be recommended to the physicians who are interested in executing the program but feel the need of help with certain phases of the examination.

The Duty of the Family Physician in the Presence of a Positive Tuberculin Test, Lewis J. Moorman, M.D., Journal Oklahoma State Medical Association, January, 1937.

MEDICAL ECONOMICS

Edited by O. W. Davidson, M.D. of the Medical Economics Committee

WHAT ARE YOUR ANSWERS TO THE FOLLOWING?

- I. Should you belong to your county medical society?
- (a) Are you one of those "joiners" who seldom go to meetings?
- (b) Do you willingly pay dues to other organizations and complain that medical society dues are too high?
- (c) Would you as willingly pay an extra assessment for the improvement of the organization that provides your income as you do to your other organizations?
- II. Should you discount your bills?
- (a) Do you think the system of discounting increases your collections?
- (b) Do you think it educates your patients to wait for discounts?
- (c) Do you offer greater discounts than commercial firms?
- (d) Do you offer a lower charge for cash settlement and an increased amount if the bill is carried on the books?

III. Do you have competitors?

- (a) Do the doctors of medicine in your community treat each other as competitors or associates?
- (b) Is public opinion affected by the action of competitive physicians?
- (c) Do you create, in your community, the idea that the pharmacist, dentist, nurse, or the veterinarian is engaged in a competitive or an allied profession?
- IV. Do you have a salaried county physician?
- (a) Does the public have the impression that he takes care of all the indigent cases in your county?
- (b) Do you contribute to this impression by treating without question a number of such cases?
- (c) Do you think your county commissioners will ever provide funds for adequate care of these cases, as long as you continue to burden yourself by sharing the county physician's load?

- V. Should medical students have additional training?
- (a) Granting that the medical profession approves and recommends masseur treatments in certain cases; do you believe there would be any virtue in giving such training in medical schools?
- (b) Realizing that medical schools provide and operate physio-therapy departments do you believe a medical student should have this training?
- (c) Statistics give the average yearly income of the chiropodist as \$3,000.00. Do you favor the dignification of this branch of treatment and the training of medical students to practice it, or would you rather continue the practice of referring such patients to the drug store for corn plasters and bunion pads?
- (d) Do you favor the instruction of medical students in medical economics, medical ethics, professional salesmanship, office management, and medico-legal subjects?
- VI. Do you favor credit ratings on your patients?
- (a) Do you find professional credit ratings of value?
- (b) Do you make it easy for patients, who owe one or more other physicians, to come to you?
- (c) Do you realize that commercial credit ratings are seldom affected by unpaid professional accounts?
- VII. Are you familiar with the law?
- (a) Do you know the law in your county or state concerning indigent care, the healing arts, collection of fees, care of crippled children, recording of births, and the reporting of diseases?
- (b) Are you familiar with proposed legislation that affects all of the healing arts? VIII. Are you interested in medical economics?
- (a) From what sources do you obtain the most medical economic information; newspapers, organization publications, radio and public speeches, or free circulation periodicals?
- (b) Do you read and study lengthy articles on these subjects, or do you find abstracts more helpful?
- (c) Do you cooperate with your local society in the execution of plans agreed upon by the majority of the organizations?

COLLECTION AGENCIES

The wave of crime that followed the World War brought into prominence a word not new to the lexicon but taking on new significance and connotations, the word, racket. Webster defines it as a scheme, dodge, trick, or the like, and such it has proved to be with intense emphasis. Toll is levied on all sorts of legitimate business and the practice of medicine has not been entirely exempt. One means of separating the doctor from money that belongs to him is through mushroom and unethical collection agencies.

A letter from a doctor received today tells how he was "taken for a ride", to use his own expression. The plan was to collect his accounts and return two-thirds to the doctor. Accounts collected by the doctor himself were subject to the same terms. He sent the agreed upon commission for an account he had collected and requested the agency to remit the amount due him from collections they had made. His reply was a form letter, "We regret to advise you that the amount of money received at our office is not sufficient to cover our commission and office minimum charge. However, in view of the persistent efforts that are being put forth in your behalf, we are confident that further collections will be made and before long we will be in a position to render a favorable statement and check for whatever amount may be due". The doctor adds, "I do not regret losing the accounts, as to me they were dead and the patients no longer in my confidence, but I do hate to admit that I was taken for a ride".

Not all collection agencies are dishonest, of course. There are many which have been in business for many years and are rendering service to the doctor which is eminently satisfactory, but all of their good work is offset by the racketeering of the fly-by-night concerns who are in business solely to profit by the credulity and lack of business acumen of the average physician. Even when they directly violate the law, the doctor usually will take no action, since he feels that they handled dead accounts that he could not have collected anyhow and that, therefore, he has lost nothing. However, they usually depend upon sharp practices and stay within the letter of the law. A common practice is for their high-pressure salesmen to state that the doctor is not obliged to sign a contract; but when he submits the list of accounts he actually does enter into a contract that binds him hand and foot.

Another ingenious scheme that was current some years ago was worked as follows: salesman would cite a court decision that outlawed accounts were property that could be bought and sold and advertised for sale. Forms were sold to the doctor for \$35.00 which were to be mailed to the delinquent debtors, warning them that their accounts were to be advertised for sale to all tradesmen with whom they did business, the idea being to frighten them with the threatened publicity. The company behind the scheme was supposed to supply all needed service and to collect any other accounts at a very small commission. Needless to say, their interest waned with the \$35.00 sale.

The doctor can easily protect himself against these unethical concerns. No matter how rosy the picture painted by the slick salesman, he should never turn over any accounts until he has thoroughly investigated the concern. Frequently they give references, relying on the fact that most doctors will accept them as bona fide and not get in touch with the individuals mentioned to determine if they actually received the service claimed. Local Boards of Trade usually will have data on the collection agencies doing business in their territories and will be glad to supply what information they may have. Finally, the doctor should read carefully the entire contract he is entering into, including all of the fine print, so that he will know exactly where he stands legally in the transaction. Accounts remain assets until they are outlawed by the statute of limitations, and the doctor is merely foolish who heedlessly tosses them away as worthless.—The Medical World, February, 1937.

GETTING PAID FOR SERVICES RENDERED

Probably all doctors are aware that when they render medical or surgical services both parties, the doctor and the patient, are bound by the laws covering contract. The doctor contracts to give the best service of which he is capable and the standard is determined by the abilities of his colleagues in his community. Thus, if he holds himself out as a specialist in some branch of medicine, he is held to a higher standard than otherwise. However, he does not contract in any case to get his patient well. The patient contracts to pay for the service that has been rendered to him. The contract is as much

in existence as though the two parties had drawn up a legal instrument and affixed their signatures before witnesses.

This much is generally known by the members of the profession, but special circumstances sometimes arise where the doctor does not know that he is protected by law in the collection of his fee. An unknown party calls a doctor from his bed at two o'clock some morning to say that a woman is unconscious and needs help immediately. The doctor rushes out and applies the necessary treatment, possibly saving the woman's life; but when he attempts to collect a fee he is told by the woman that she did not call him, was not aware that he had been called and was not liable for his fee. Many doctors in these circumstances write down the transaction to profit and loss and forget about it. If they were only aware of their rights they would make the woman pay for their services.

The situation in the case given is covered in the law by what is known as quasi contracts. Either the woman or her husband, if she has one, is bound to pay for the doctor's treatment. Equivalent transactions are an everyday occurrence. When one selects a necktie, for example, from the counter, he does not say to the clerk, "Will you sell this to me for one dollar"? When he buys a ticket on the railroad for some point on its line he does not make the agent state that the train will carry him to his destination. In either case the contract is implied and has a legal stasus. Likewise, there is a quasi contract whenever a doctor renders emergency service, and the law will not permit the recipient to benefit because he was unable at the time to enter into a verbal contract.—The Medical World, February, 1937.

THE GREATER EVIL

Why the medical profession as a whole should be opposed to socialized medicine is apparent to any layman who will take the trouble to study propaganda in its behalf. Dr. Terry M. Townsend, chairman of the committee on Medical Trends of the State Medical Society, presents some aspects calculated to cause concern to the layman on his own account. He has this to say:

If the public does not awake . . . they are likely to have foisted on them a system by which they will be subjected to a pay roll tax for medical service. In addition the workingman will be required to contribute to the support of an army of clerks, super-

visors, statisticans, "health study experts", snoopers, arguers and propagandists. Their job will be to entrench themselves on the public pay roll, interfere with the doctor as much as possible to make themselves important, and spend a large part of their time keeping in right with the bureaucrats above them. America does not need and does not want a medical system run by non-medical people who could not tell the difference between an x-ray and an electrocardiogram.

Dr. Townsend adds that whenever compulsory health insurance is in operation vital statistics prove that the health of the people there is below the standard now existing in the United States. Laymen might not know about that, but the layman who has ever before come into contact with the squirts, whippersnappers and nosey parkers who invariably attach themselves to bureaucracy understands the rest of it right enough. It is bad enough now for a poor man to go into some clinics to be handled by a sprout just out of medical college as if he were a parcel of none-toowelcome merchandise. What it would be under socialized medicine masquerading as compulsory health insurance is something upon which it is painful to reflect.

It is perhaps true that the health of the general public is no better than it should be. But it is by no means certain that public health under socialized medicine would be much better than it is. A greater evil, however, than indifferent health is the growth of the noxious spirit of bureaucracy.—The New York Sun, February 2, 1937.

Pratt of Detroit estimates that the annual number of abortions in the United States approximates 750,000 and that from 8,000 to 10,000 women die annually from abortions.—The Nebraska State Medical Journal, February 1937.

The oldest municipal medical college in the United States, The University of Louisville Medical School, will celebrate its Centennial March 31 to April 3, at Louisville, Kentucky.

The Chicago Medical Society has taken steps to protect its members from theft of valuable equipment by offering a fifty dollar reward "for the arrest and conviction of any person forcibly entering or stealing the car of a member, or stealing a grip or instruments therefrom, or holding up a member while engaged in the practice of his profession during the year 1937".

If a man empties his purse into his head, no man can take it away from him. An investment in knowledge always pays the best interest.—B. Franklin.

MEDICAL LITERATURE

Edited by Will C. Menninger, M.D.

COLD WATER TREATMENT OF BURNS

Rose gives the results of treatment of 130 cases of burns treated with the usual tannic acid method with an average mortality of 13.3 per cent. A later series of fifty-two cases are presented which were treated by preliminary immersion of the patient in cold water, with an average mortality of 7.7 per cent. patient is kept in the water for about three hours. Ordinary tap water is used of a temperature of 60 to 70 degrees F. and the water is gradually warmed as rapidly as the pain sensation will permit; by the beginning of the third hour the temperature is 98 degrees F. Patients with severe pain are relieved in a few seconds and those in early shock often respond promptly with no other measure. If the patient is far advanced in shock when first seen. fluids by mouth, transfusions and other shock therapy is instituted while the patient is in the tub. After the patient has been in the water two to three hours, a mild debridement is performed and if much grease and dirt are present, the body is scrubbed from head to foot with soap and sterile water. Morphine is given if indicated. After the burned areas and body are clean, the patient is rinsed with sterile water and dried with warm air from an ordinary electric hair drier. The patient is then placed on sterile sheets and burned areas coagulated by Bettman's tannic acid and silver nitrate treatment or Coan's ferric chloride method. The author states that the primary phase of shock is due to the pain of the direct nerve injury, with its resultant reflex vasodilatation while the secondary phase of shock is due to loss of fluids from the circulating blood; his initial cold water treatment of burns combats both factors tending to cause both phases of shock.

Rose, H. W.: Initial Cold Water Treatment For Burns; Northwest Medicine: 35:7:267-270: July, 1936.

PRESACRAL SYMPATHECTOMY

A discussion of the use of resection of the presacral nerve for dysmenorrhea and pelvic pain is presented by Abbott. A description of the anatomy and physiology concerned and the mechanism of dysmenorrhea is given and eight

cases are presented. The eight cases in the series showed little or no pathologic change in the pelvis and were relieved by resection of the presacral nerve. Altho the author draws no general conclusion because of the small number of cases studied, he feels that the results obtained seem to justify the use of this procedure for patients suffering from severe dysmenorrhea which fails to respond to the ordinary methods of treatment. Twenty-nine references are appended.

Abbott, W. D. Resection of the Presacral Nerve for Dvs-menorrhea and Pelvic Pain, Annals of Surgery 104:351-358, September 1936.

ARTIFICIAL FEVER TREATMENT OF CHOREA

(Abstracted by Leland F. Glaser, M.D.)

The authors report the results of treatment of thirteen cases of Sydenham's chorea by artificial fever produced by means of the Kettering hypertherm. In the treatment of the first few cases, fever sessions of two and one-half hours were given at intervals of three to six days and at temperatures ranging from 103 degrees to 106 degrees F. (rectal). Later it was found that the patients responded more rapidly if the two and one-half hour sessions were given daily at temperatures of 105 to 106 degrees F. (rectal). This procedure materially shortens the duration of the choreic attack and quickly restores the patient to normal activity. Each series of treatments varies in number from eight to twenty-one, depending on the severity of the case. Each patient on the average received twenty-four hours of fever at 105 to 106 degrees F. (rectal). All the patients reported were cured and to date there were no recurrences. None of the patients showed any further damage to their hearts that could be attributed to the artificial fever. The authors claim that the amount of shock following triple injection of typhoid vaccine is a serious contraindication when there is already a badly damaged rheumatic heart. The ease of controllability of temperature when produced by mechanical means is a distinct advantage over fever produced by foreign protein therapy. Treatment may be terminated at will should unforseen complications arise. None of the authors patients showed loss of weight during the fever session and an adequate fluid balance can be maintained.

Clark H. Barnacle, M.D.; Jack R. Ewalt, M.D., and Frank-lin G. Ebaugh, M.D.: Artificial Fever Treatment Of Chorea: Journal American Medical Association: 106:24:2046:2049: June 13, 1936.

NEWS NOTES

CANCER CONTROL

The Kansas Medical Society, in conjunction with its Committee on Control of Cancer, the Northwest Kansas Medical Society, the Reno County Medical Society, the Cloud County Medical Society, the Finney County Medical Society and the Wyandotte County Medical Society, presents Dr. Burton T. Simpson, Buffalo, New York, Director of the New York Institute for Study of Malignant Disease; Dr. Louis C. Kress. Buffalo, New York, Chief Surgeon of the New York Institute for Study of Malignant Disease; and Dr. Frank L. Rector, Evanston, Illinois. Representative of the American Society for Control of Cancer, as speakers for a Second Annual Cancer Control Program. The professional meetings will include cancer topics of interest to all physicians; will be open to all members of the Society, members of the Kansas State Dental Association and their guests. No admission charge will be made at any of the meetings. The schedule is as follows:

For the Profession:

March 15—Emporia, 8:00 p.m., Broadview Hotel.

March 16—Hutchinson, 8:00 p.m.. Bisonte Hotel.

March 17—Garden City, 8:00 p.m., Court Room.

March 18—Colby, 8:00 p.m., O'Pelt Hotel, March 19—Concordia, 8:00 p.m., Episcopal

Parish Hall.

March 20—Kansas City, 8:00 p.m., Chamber of Commerce Building.

For the Public:

March 15—Emporia, 2:00 p.m., Broadview Hotel.

March 16—Hutchinson, 2:00 p.m., High School. March 17—Garden City, 2:00 p.m., Court Room.

March 18—Colby, 2:00 p.m., High School.

March 19—Concordia, 3:15 p.m., High School. March 20—Kansas City, 2:00 p.m., Memorial Building.

Reaction to the first program, held last year, was most favorable among laymen. Again, the public meetings will include educational information about prevention, early recognition and cure of cancer. All laymen are invited to attend the public meetings. There is no admission charge.

Plan to attend the professional meeting most convenient to your location.

LEGISLATION

The following is a report to date of March 8, concerning matters of medical interest in the present session of the legislature:

Basic Science Law

HB 226—Passed by the House of Representatives,

February 27, with only six opposing votes, (Burden. Cross, Musseman, Pettit, Romeiser, and Weaver).

The bill however was drastically amended before passage by addition of the following line in Section one of the exemption clause, "-nor to any of the professions or vocations which have state boards authorized by law to examine and license applicants to practice the healing arts at the time this act shall take effect". Although this amendment limits the effect of the law only to unlicensed practitioners, several interesting possibilities are presented therein: that it will provide a better method than at present exists for curbing the illicit practitioner; that the law as established on statute books is an excellent basic science measure with the exception of the broad exemption clause and that it may therefore be capable of amendment after it has proven its worth; and that possibly those professions which at present believe in the law (medicine, chiropody, dentistry and veterinarian) may choose to participate immediately by board rulings, leaving only chiropractic and osteopathy not included. The bill at the time of going to press had been approved by a Senate committee and awaited vote by the Senate. Although it is still being strongly opposed by chiropractors and osteopaths (who do not desire it even as amended) it is believed that it stands a good chance for passage. A complete report concerning this measure is to be made by the Committee on Public Policy to the county medical societies within the near future.

Injunction Bill

Special Bulletin

HB 491 introduced by Dr. R. L. Von Trebra (see below) was passed by the House of Representatives on third reading on March 11. Final vote was seventy-six for to eleven against the measure.

The bill is now pending in the Senate where it will probably be voted upon during the next few days.

HB 491—Another measure in which the society has been greatly interested and sponsored by the medical profession. This bill which is reprinted below is contemplated to add the remedy of injunction and quo warranto to the Medical Practice Act for the obvious advantages of efficiency and promptness in apprehending unlawful practitioners of medicine and surgery.

An Act establishing the right of injunction and quo warranto in certain cases, and supplementing section 65-1006 of the General Statutes of 1935.

Be it enacted by the Legislature of the State of Kansas:

Section 1. An action in injunction or quo warranto may be brought and maintained in the name of the state of Kaansas to enjoin or oust from the unlawful practice of medicine and surgery any person who shall practice medicine and surgery as defined by the law of Kansas without being duly licensed therefore.

Sec. 2. The authority conferred by this statute shall be in addition to, and not in lieu of, authority to prosecute criminally any person unlawfully engaged in the practice of medicine and surgery. The granting and enforcing of an injunction or quo warranto to prevent the unlawful practice of medicine and surgery is a preventive measure, not a punitive measure, and the fact that a person has been charged with or convicted of criminally having practiced medicine and surgery shall not prevent the issuance of a writ of injunction

or quo warranto to prevent his further practice of medicine and surgery; nor shall the fact that a writ of injunction or quo warranto has been granted to prevent further practice preclude the institution of criminal prosecution and punishment.

Sec. 3. This act shall take effect and be in force from and after its publication in the official state paper.

HB 491 was approved unanimously by the House Judiciary Committee, and although being opposed strenuously by certain cults there is good possibility for its passage.

Bills Passed

Bills passed to date in which the medical profession is interested are as follows:

SB 168—An appropriation measure providing \$250,000 for additional facilities at the Norton Tuberculosis Sanatorium; \$250,000 for additional facilities at the Larned State Hospital; \$60,000 for additional facilities at the Parsons State Hospital for Epileptics.

SB 65—An act amending the exemption statutes and providing that the library and office furniture of any professional man should be exempt from execution.

SB 4—An act providing for the regulation and licensing of persons operating motor vehicles and including therein restrictions including physical defects.

Bills Killed

Bills killed in which the medical profession is interested:

SB 322—An act relating to the production and distribution of milk.

HB 75—An act relating to syphilis and providing for the compulsory sterilization of males under sixty-five and of females under forty-five.

HB 66—An act creating a state examining board for clinical technicians. Killed by reason of inadvertent drawing of the bill so that all healing professions were affected.

SJR 6—An act creating a commission of five, consisting of the dean of the Kansas University School of Medicine, one member appointed by the president of the Kansas Medical Society and three members appointed by the governor to study during the next two years the intoxicating qualities of beer and wines.

SB 29—An act providing for the annual inspection of boilers for a three dollar fee and broad enough in definition to include physicians' sterilizers and dentists' vulcanizers.

SB 1—An act relating to privileged communications and affecting physicians and their patients.

SB 6—An act extending the statute of limitations on contract actions from five to ten years and possibly affecting malpractice actions.

HB 104—An act relating to state responsibility to counties for destitute insane persons who cannot be admitted to state hospitals.

SB 105—An act transferring the functions of the Kansas Deaf and Dumb School and the Kansas Blind School from the State Board of Administration to the State Board of Regents.

SB 137—An act relating to insane persons.

 $HB\ 71$ —An act relating to the collection of accounts from estates.

SB 465—An act providing for the appointment of a psychiatric social worker to supervise the educational activities of the State Industrial Farm for Women.

SB 412—An act establishing experimental work in psycho-phono-physics at several state institutions.

HB 256—An act regulating the practice of pedopractic and providing a state examining board for pedopractors.

Bills Pending

Bills pending at this time in which the medical profession is interested are as follows:

HB 476—An act providing compulsory re-registration of osteopaths upon payment of an annual fee of five dollars and that this may be used "for the purpose of promoting and furthering the art, science and practice of osteopathy in this state". (Apparently intended to finance their state society.) (Still pending in original committee.)

HB 428—An act to establish a county hospital in Sherman County and providing authority to vote from \$35,000 for bonds (passed by House of Representatives.)

HB 236—An act providing for a vote on \$15,000 in bonds to make additions to a hospital in Kingman (Passed by House of Representatives).

SB 116—An act appropriating \$300,000 for a state tuberculosis sanatorium in Cherokee county (passed by Senate).

HB 444—An act regulating the practice of pedopractic and establishing a licensing board therefore (still pending in the original committee).

HB 430—An act providing for physical examinations of persons before issuance of a marriage license (rereferred to the House Health Committee for medical clarification).

SB 430—An act amending the present chiropody law (still pending in the original committee).

SB 452—An act transferring Sedgwick County Tuberculosis Sanatorium to the State of Kansas and providing \$250,000 for additional improvements.

HB 521—Companion bill to SB 430 and amending the chiropody act (still pending in the original committee).

HB 509—An act providing an examining board for clinical technicians and not affecting practitioners of the healing art.

HB 503—An act creating a state board of examiners for physio-therapy and regulating the practice of physiotherapists (still pending in the original committee).

HB 389—An act providing for the transfer of the Sedgwick County Tuberculosis Sanatorium to the State of Kansas. Companion bill to SB 45.

HB 396—An act relating to lighting in public schools. HB 186—An act relating to foods and public health and the licensure of places where food is prepared.

HB 237—An act relating to nurses and amending the present requirements for nurses training hospitals.

HB 162—An act extensively amending the present workman's compensation law.

SB 24—An act relating to traffic on highways establishing uniform traffic regulations, etc. (Was amended in certain places to except physicians and ambulances while engaged in emergency calls). (Passed by the Senate).

HB 393-394-423—Relating to cosmetologists.

HB 528—An act concerning the production and distribution of milk.

SB 439—An act amending and re-codifying the corporation law of Kansas (present law forbids medical practice by corporations).

SB 313—An act relating to payment of counties for medical care of insane persons.

Old Way...

CURING RICKETS in the CLEFT of an ASH TREE

FOR many centuries,—and apparently down to the present time, even in this country—ricketic children have been passed through a cleft ash tree to cure them of their rickets, and thenceforth a sympathetic relationship was supposed to exist between them and the tree.

Frazer* states that the ordinary mode of effecting the cure is to split a young ash sapling longitudinally for a few feet and pass the child, naked, either three times or three times three through the fissure at sunrise. In the West of England, it is said the passage must be "against the sun." As soon as the ceremony is performed, the tree is bound tightly up and the fissure plastered over with mud or clay. The belief is that just as the cleft in the tree will be healed, so the child's body will be healed, but that if the rift in the tree remains open, the deformity in the child will remain, too, and if the tree were to die, the death of the child would surely follow.

*Frazer, J. G.: The Golden Bough, vol. 1, New York, Macmillan & Co., 1928



It is ironical that the practice of attempting to cure rickets by holding the child in the cleft of an ash tree was associated with the rising of the sun, the light of which we now know is in itself one of Nature's specifics.

New Way...

Preventing and Curing Rickets with OLEUM PERCOMORPHUM

NOWADAYS, the physician has at his command, Mead's Oleum Percomorphum, a natural vitamin D product which actually prevents and cures rickets, when given in proper dosage.

Like other specifics for other diseases, larger dosage may be required for extreme cases. It is safe to say that when used in the indicated dosage, Mead's Oleum Percomorphum is a specific in almost all cases of rickets,

regardless of degree and duration. Mead's Oleum Percomorphum because of its high vitamins A and D content is also useful in deficiency conditions such as tetany, osteomalacia and xerophthalmia.

Mead's Oleum Percomorphum is not advertised to the public and is now obtainable at drug stores at a new economical price in 10 c.c. and 50 c.c. bottles and 10-drop capsules.

MEAD JOHNSON & COMPANY, Evansville, Indiana, U.S. A.

SB 381—An act making appropriation to certain hospitals for care and treatment of orphans and destitute children.

SB 293—An act permitting McPherson County to lease its county hospital to a private corporation.

SB 110—An act relating to the qualifications of teachers in the School for the Deaf and Dumb.

SB 451—An act permitting Sedgwick County to pay certain outstanding bills for care of crippled children.

SB 400—An act creating a special division for administration of blind welfare.

SB 362—An act relating to appointment of deputy coroners in Sedgwick County.

SB 82—An act relating to fraternal benefit societies. SB 155—An act relating to advertising of dentists and certain other matters pertaining to dentistry.

SB 15—An act relating to birth and death certificates. SCR 2—An act restoring the salaries of state institution employees to pre-depression levels.

SB 30—An act transferring the duties of the inspectors of certain state boards (including State Board of Health) to local sheriffs and peace officers.

SB 31—An act which among other things transfers compensation hearings to probate courts.

SB 20—An act relating to the fees and salaries of certain officials including the State Board of Health.

SB 3—An act relating to financial responsibility of operators of motor vehicles and providing for the cancellation of car licenses and drivers licenses in the event judgments arising from accidents are not paid. (Would possibly include hospitals and physicians accounts).

HB 511—An act relating to the practice of chiropractic (still pending in the original committee).

HB 520—An act relating to food and public health.

HB 474—An act authorizing vote upon \$100,000 in bonds for the establishment of a city hospital in Russell.

HB 468—An act relating to the health and safety of miners.

HB 449—An act authorizing vote upon bonds for establishment of a county hospital in Johnson County.

HB 427—An act creating a state commission for certain benevolent institutions.

HB 338—Companion bill to SB 293 pertaining to leasing of McPherson County Hospital.

HB 354—An act relating to the state files and records of illegitimate births.

HB 480—An act relating to physically bandicapped

HB 175—An act relating to physically handicapped persons.

SB 129—An act relating to Social Security and representing the Senate Public Welfare Committee bill on this subject (provides for adoption of medical plans for furnishing medical assistance to social security recipients).

HB 557—An act relating to social security and representing the House Public Welfare Committee bill on this subject (includes Secretary of State Board of Health as member on state welfare board and provides a means for local medical plans to furnish medical attention to social security recipients).

Moderate labor of the body conduces to the preservation of health, and cures many initial diseases.—Dr. W. Harvey.

1937 STATE MEETING

Extensive preparations are now in full swing for the 1937 state meeting to be held in Topeka on May 3, 4, 5 and 6. Scientific program acceptances in addition to those previously announced in The Journal have been received from Dr. J. Albert Key, St. Louis, Missouri; Dr. T. E. Carmody, Denver, Colorado; and Dr. Meyer Wiener, St. Louis, Missouri.

Among other events scheduled will be alumni banquets to be held Tuesday evening, May 3, for the graduates of the following schools: The University of Kansas; the old Kansas City Medical College; the University Medical School, Kansas City, Missouri; Northwestern University; Rush Medical College; University of Nebraska; University of Oklahoma; and Washington University.

The Committee on Scientific Exhibits reports that arrangements are being completed for a most interesting display, and urges any members who may have material of this kind available for presentation to correspond at once with Dr. F. C. Taggart or Dr. A. J. Brier, Topeka.

The complete program of the meeting will be announced shortly and will appear in detail in the April issue of The Journal.

INDIGENT ARSENICALS

The Kansas State Board of Health has announced recently that through funds available under the Social Security Act, free arsenicals will be furnished to doctors of medicine for treatment of indigent syphilitics.

For the present no special forms or requisitions are necessary to secure these materials. Requests should be accompanied by the usual blanks for reporting syphilitic cases or if cases have been previously reported all that is necessary is a letter giving the name or number and approximate date of reporting. Inquiries should be addressed to Dr. R. H. Riedel, Director of Division of Venereal Diseases, Kansas State Board of Health, Topeka.

The above program has been developed in cooperation with the Society Committee on Venereal Diseases.

AMERICAN COLLEGE OF SURGEONS

The sectional meeting of the American College of Surgeons will be held in Denver on April 7, 8, and 9. The states of Colorado, Utah, Wyoming, Nebraska, Kansas, Oklahoma, New Mexico and Arizona will participate.

BRINKLEY

Dr. John R. Brinkley and his radio station, XERA, at Villa Acuna, Mexico, are the subjects of a formal letter of complaint recently filed with Secretary of State Cordell Hull by the National Institute of Manufacturers and Distributors. The letter charges that this station is being used "—for unfair, if not illicit, competition with loyal and taxpaying business and professional enterprise in this country"; and urges that the Department of State close the Mexican border to Dr. Brinkley and associates (who are all resident citizens of the United States) by cancellation of their passports.



THE NATIONWIDE campaign to control venereal disease is receiving valuable publicity from many sources. The final results of the campaign, however, will depend upon the effectiveness of the products used and the proper supervision of all cases.

It is generally agreed that efficient treatment requires the administration of an arsenical and a heavy metal, alternately and continuously, for a period of from twelve to eighteen months. For this purpose Squibb has available two outstanding preparations—Neoarsphenamine and Iodobismitol with Saligenin.

Neoarsphenamine Squibb is designed to produce maximum therapeutic results. It is noted for its high stability, chemical uniformity, rapid solubility, brilliantly clear solution, low toxicity and high spirocheticidal power. Equally effec-

tive for the conditions in which their use is indicated are Arsphenamine Squibb and Sulpharsphenamine Squibb.

Iodobismitol with Saligenin provides all the systemic effects of bismuth in the treatment of syphilis. It presents bismuth in anionic (electro-negative) form. It is slowly and completely absorbed and slowly excreted, thus providing a relatively prolonged bismuth effect. Repeated injections are well tolerated in both early and late syphilis.

Iodobismitol with Saligenin is a propylene glycol solution containing 6 per cent sodium iodobismuthite, 12 per cent sodium iodide and 4 per cent saligenin (a local anesthetic).

For literature address the Professional Service Department, 745 Fifth Avenue, New York City.

E-R-SQUIBB & SONS

MANUFACTURING CHEMISTS TO THE MEDICAL PROFESSION SINCE 1858

Ottawa, Kansas, February 17, 1937. Hey Fellows:

You guys who carry a handicap of anywhere from ten on up, get em ready: Monday, May 2, Topeka, Kansas. You know, just one day before the Kansas Medical Society meets. This year is to be a test of your cleverness. Are you clever enough to take a day off without hurting anybody? You just as well get your old clubs out, shine 'em and start practicing. I know you are going to be there, everybody knows you are going to be there.

Trapshooters: I said trapshooters. Begins with a T. Get your gun out and take that three load limiter out, oil the whole shebang up and remember show em no mercy. Skeet, Traps, in facteverything. You remember what happened at Salina. Well that was just the beginning. Get Ready, Aim, Fire. When you aim, head her toward Topeka. All day. Monday, May 2, who cares.

Oh yes: What about Monday night? Well, Some of you have been to one of these occasions. Some of you have. What are you going to do this year? Miss it? Well no, begins with H. Surely you owe yourself one good day out of two years, for it has been two years now. Well, I'll be seein you.

Lerton V. Dawson, M.D., Secretary on his last year.

MEDICO-MILITARY SYMPOSIUM

The spring Medico-Military symposium will be held in Kansas City, Missouri, on March 15 and 16. This is sponsored by the Kansas City Southwest Clinical Society and the Medical Departments of the Army and Navy of the Seventh Corps Area. The program promises to be sufficiently varied to be interesting and instructive to every physician. Four symposia, comprising the various specialties, the respiratory, gastro-intestinal systems and the heart will be discussed by thirty-two Kansas City physicians. The military program will be furnished by the Army and Navy Officers of the Corps Area. Military credit will be offered to all Reserve Officers who register. There will be no registration fee for this meeting.

Dr. Paul B. Magnuson and Dr. P. T. Bohan will be the principal speakers.

The meetings are to be held in the Kansas City General Hospital and the officers of the hospital have offered a complimentary luncheon to all registrants on both days.

The Kansas City Academy of Medicine will hold their monthly dinner on Tuesday. March 16. Dr. C. S. Beck, Associate Professor of Surgery. Western Reserve University School of Medicine, will be the guest speaker. His subject will be "Recent Advances in Cardiac Surgery". All registrants are invited to attend this scientific meeting.

NEW PRISON PHYSICIAN

The Board of Administration recently announced the appointment of Dr. Charles Vestal. Holton, as physician for the Kansas State Prison at Lansing.

NORTHWEST CONFERENCE

Dr. Arthur D. Gray, Topeka, was a speaker on the program of the Northwest Medical Conference held in Chicago on February 15-16, and attended by presidents, secretaries, editors and other officers of the state medical societies of the middle west.

His paper on "Venereal Disease Program of the Kansas Medical Society" was an outline and comment on tentative plans and problems of the society committee for this work.

Members from Kansas who attended the meeting were Dr. H. L. Snyder, Winfield, Dr. J. F. Hassig, Kansas City, Dr. C. H. Ewing, Larned, Dr. H. R. Wahl, Kansas City, and Mac Cahal, Wichita.

The Kansas State Board of Health reports the following vital statistics for 1936: 30,542 births—503 less than the total for 1935; 21,721 deaths—an increase of 1,359 over 1935.

MENNINGER SPEAKERS ANNOUNCED

Guest speakers at the third annual Postgraduate Course on Neuro-psychiatry in General Practice, April 19 to 25, at the Menninger Clinic, Topeka, will be: Dr. Franklin G. Ebaugh, Denver, professor psychiatry, University of Colorado Medical School: Dr. Winchell McK. Craig, Rochester, Minnesota, of the Section on Neurology, surgical, the Mayo Clinic: and Dr. J. W. Kernahan, Rochester, Minnesota, pathologist to the Mayo Clinic.

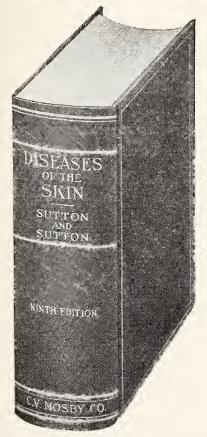
MORBIDITY REPORT

New communicable disease cases in the state as compared with last month are reported by the Kansas State Board of Health as follows:

Disease	Month ending February 27	
Influenza	7,386	8.983
Scarlet Fever		988
Mumps		527
Pneumonia	718	490
Chickenpox		434
Tuberculosis		119
Syphilis		138
Whooping Cough		84
Smallpox	127	80
Gonorrhea	76	71
Diphtheria	36	36
Measles	27	24
Erysipelas	16	10
German Measles	14	5
Undulant Fever		1
Vincent's Angina	5	3
Meningitis		2
Cancer		5
Septic Sore Throat		4
Poliomyelitis		3
Typhoid Fever		6
Encephalitis	2	0

The Ninth Edition of the Standard Text on Dermatology— Eighteen Years of Outstanding Service to the Medical Profession of America.

SUTTON'S DISEASES OF THE SKIN



WHAT THE CRITICS SAY:

Journal American Medical Assn.—

"The excellence of the work is revealed by a careful examination of its contents."

The Lancet (London)—

"Probably the most complete and trustworthy work of reference on its subject in the English language, and is worthy of a place on the shelves of every practicing dermatologist."

British Journal of Dermatology-

"The type and general make-up of the book are admirable, and we have no doubt of its continued success."

U. S. Naval Medical Bulletin-

"This is one of the best written and most handsomely illustrated manuals on dermatology in print. The skin lesions of gangosa, verruca peruana, oriental sore, leprosy frambesa, and other tropcal skin lesions are given more extensive treatment than is commonly the case in American works on dermatology."

Virginia Medical Monthly—

"Every practitioner needs in his library a standard work on dermotology. To the specialist this book is particularly desirable because of the bibliography which is appended to each subject. Its field of usefulness is tremendously wide. Its illustrations and the idealism of the publisher, as expressed in the technique of printing, make it a very desirable book."

Minnesota Medicine-

"Sutton's volume on dermatology which first appeared in 1916 has been accepted as one of the best standard texts on the subject. The present volume is a large volume of 1,433 pages, and is especially valuable on account of the abundance and excellence of the photographs."

Southern Medical Journal—

"The commanding place of this work among the standard texts in English on skin diseases is made even more secure by this fine edition."

Archives of Dermatology and Syphilis-

"It is encyclopedic and scholarly. It has the spirit of an enthusiastic devotee of a specialty, and it has the vigor and piquant spirit that are Sutton. There is no need to advise dermatologists or other physicians that it should be on their shelves. They have already decided that for themselves, and in one edition or another it is found everywhere."

1433 pages, with more than 1310 illustrations in the text, and 11 color plates. Ninth

revised and enlarged edition. Beautiful binding. Price, \$12.50.

By Richard L. Sutton, M.D., Sc.D., LL.D., F.R.S. (Edin.), Professor of Dermatology, University of Kansas School of Medicine, and Richard L. Sutton, Jr., A.M., M.D., L.R.C.P. (Edin) Instructor in Dermatology, University of Kansas School of Medicine.

The C. V. Mosby Company—Publishers—3523 Pine Blvd.—St. Louis, U. S. A.

INTERNATIONAL CONFERENCE ON FEVER THERAPY

The First International Conference on Fever Therapy will hold its sessions on March 29 to 31, 1937, at the College of Physicians and Surgeons, Columbia University, New York City. Ministries of health from many countries have indicated their intention to send official representatives to the conference. For further information apply to the General Secretary, Dr. William Bierman, 471 Park Avenue, New York City.

COMMITTEE ON PUBLIC POLICY

A meeting of the Committee on Public Policy was held in Topeka, on February 28. Legislative plans were discussed.

HEALTH UNIT

Following several conferences between the Butler-Greenwood County Medical Society, the county commissioners of Butler County and the Kansas State Board of Health, plans have been completed to establish a full time county health unit in Butler County. The unit will consist of Dr. L. F. Steffen, formerly of St. Mary's, as physician director, a sanitary engineer, and a nurse.

The budget for the first year's operation of the unit totals \$8,500.00, of which \$3,100.00, will be paid by the federal government under the Social Security Act and \$1,200.00, by the state, also from Social Security funds. The remainder is to be furnished by the county. The physicians of Butler County will serve as advisors of the program.

COMMITTEE ON CONTROL OF CANCER

The Committee on the Control of Cancer is sponsoring the week of March 15, its Second Annual Cancer Control Program. (See page 115.)

The committee was fortunate in being able to again secure Dr. Burton T. Simpson, Buffalo, New York, Director of the New York Institute for Study of Malignant Disease, who attended the first program held last year; also Dr. Louis C. Kress, Buffalo, Chief Surgeon of the New York Institute for Study of Malignant Disease; and Dr. Frank L. Rector. Evanston. Illinois, Representative of the American Society for Control of Cancer.

The event will consist of six lay meetings and six professional meetings held at strategic geographical points of the state. Placards announcing the public meetings have been forwarded to sixty counties for distribution; individual announcements have been sent to every member of the society and two news releases have been forwarded to 600 Kansas newspapers.

Assisting with the program are the Northwest Kansas Medical Society, the Lyon County Medical Society, the Reno County Medical Society, the Cloud County Medical Society, the Finney County Medical Society and the Wyandotte County Medical Society.

The program last year was well attended and it is hoped that even a larger number of physicians and laymen will attend this year the meetings most accessible to their location.

The program is financed entirely by the Society and therefore there will be no admission charges at any of the meetings.

COUNTY SOCIETIES

A meeting of the Butler-Greenwood County Medical Society was held in Augusta on February 18. Foremost topic of discussion was whether the organization should recommend to the commissioners of Butler County that a full time health unit be inaugurated in that county.

The regular meeting of the Clay County Medical Society was held in Clay Center on February 10. Dr. W. M. Van Scoyoc, Clifton, and Dr. F. R. Croson, Clay Center, gave a report on the recent meeting of presidents and secretaries in Topeka. Dr. R. B. Stafford, State Board of Health, Topeka, spoke on the relation of the medical profession to the Social Securities Act and also told of the work of the State Board of Health. An invitation to meet with the Washington County Medical Society in March was presented and accepted.

At the meeting of the Cowley County Medical Society held in Winfield on February 18, Dr. J. V. Van Cleve. Wichita, spoke on "The Common Diseases of the Skin", and Dr. C. H. Warfield, Wichita, on "X-Ray Treatment of Cancer".

The Crawford County Medical Society, in conjunction with the Kansas State Board of Health and the Crawford County Tuberculosis Association, will sponsor free tuberculin tests for high school students in that county during the month of March.

The Ford County Medical Society met at dinner February 12. in Dodge City. Dr. Frank Teachenor, University of Kansas, gave a talk on "Cranio-Cerebral Injuries".

The county commissioners and the county poor commissioner of Greenwood County were guests of the Greenwood County MD's Society for Indigent Care at a dinner held in Eureka, March 5. At a scientific meeting following the dinner Dr. E. K. Musson, Kansas State Board of Health, Topeka, discussed "Communicable Disease Control".

Dr. R. W. Urie, Parsons, was a host to the other members of the Labette County Medical Society at a dinner held in Parsons on January 27. Dr. Ralph Bowen, Oklahoma City, gave an illustrated lecture on "Food Allergies".

The monthly meeting of the Lyon County Medical Society was held February 3, at the Newman Memorial County Hospital in Emporia.

Newly elected officers of the Marion County Medical Society are Dr. J. B. Nanninga, Goessel. president; Dr. G. J. Goodsheller, Marion, vice-president; Dr. R. R. Melton, Marion, secretary-treasurer: Dr. A. K. Ratzlaff, Hillsboro, delegate; Dr. A. C. Eitzen, Hillsboro, Dr. G. J. Goodsheller, Marion, Dr. W. M. Tate, Peabody, censors. The regular meeting was held at Marion, February 6, with papers presented by Dr. E. H. Johnson, Peabody; Dr. J. H. Saylor, Marion, and Dr. A. C. Eitzen, Hillsboro. Dr. R. R. Nykamp, Peabody, was elected to membership.

The Meade-Seward County Medical Society held a business meeting February 5, at Liberal. The new officers of the society are: Dr. W. T. Grove, Liberal, president; Dr. W. N. Lemmon, Liberal, vice president: and Dr. V. F. Morgan, Liberal, secretary.

The Montgomery County Medical Society met February 19, in Independence. The Basic Science Law was the foremost topic of discussion.

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For the adult members of the family, 'Benzedrine Inhaler' is equally useful.



BENZEDRINE INHALER

A VOLATILE VASOCONSTRICTOR

Dr. Isadore Friesner, New York City, was the main speaker at a meeting of the Sedgwick County Medical Society in Wichita, February 11. His subject was "Avenues of Infection Into the Brain".

Members of the Sumner County Medical Society met for dinner at Wellington, February 18. Papers were presented by Dr. A. R. Hatcher, Wellington, and Dr. E. Trekell, Wellington.

The Wabaunsee County Medical Society met February 12, at Maple Hill, for the annual election of officers. Dr. F. C. Stewart, Eskridge, was elected president and Dr. C. W. Walker, Eskridge, secretary.

The regular meeting of the Washington County Medical Society was held February 9, in Washington.

Mrs. L. B. Gloyne, Kansas City, president of the Kansas Medical Auxiliary, Dr. and Mrs. R. W. Urie, Parsons, and Dr. and Mrs. M. A. Johnson, Neodesha, were guests of the Wilson County Medical Society and the Wilson County Medical Auxiliary, at a dinner in Neodesha, February 8. At the professional meeting following the dinner, Dr. H. E. Morgan, Fredonia, spoke on "The Five Senses in Diagram".

The Wyandotte County Medical Society held its regular fortnightly session in Kansas City, on March 2. Drs. W. W. Abrams and P. M. Krall, Kansas City, presented a paper on "Epilepsia and Treatment", which was discussed by Drs. E. F. De Vilbiss, F. E. Angle, J. W. Faust, Kansas City and Dr. K. C. Beck, Columbia, Missouri.

MEMBERS

Dr. J. N. Dieter, Abilene, is in New York City for a month's post graduate work.

Dr. C. W. Lawrence, Emporia, and Dr. Frank Foncannon, Emporia, were recently elected president and vice-president respectively of the physicians' staff of Newman Memorial County Hospital, Emporia.

Announcement was made recently of the appointment of Dr. A. C. Baird, Parsons, as supervising division surgeon of the Parsons division of the Missouri, Kansas and Texas Railway Company.

Dr. James Bowen, who for several years has been engaged in practice at Holton and Whiting, has moved to Topeka.

Dr. Carroll Cypher Carlson, Menninger Clinic, Topeka, is the author of a paper, "Female Sex Hormone In Involution Melancholia", published in the February issue of Northwest Medicine.

Dr. W. A. Carr, Junction City, has returned from New Orleans where he spent four weeks in post graduate study.

The March 6 issue of The Journal of The American Medical Association contains an article on "The Venereal Disease Control Program in Kansas", by Dr. Earle G. Brown, Secretary of the Kansas State Board of Health. Topeka.

Dr. E. C. Moser, formerly of Wetmore, has moved to Holton.

Dr. H. L. Snyder, Winfield, Dr. J. F. Hassig, Kansas City, Dr. C. H. Ewing, Larned, Dr. H. R. Wahl, Kansas City, and Dr. M. C. Ruble, Parsons, attended the Thirty-Third Annual Congress on Medical Education and Licensure, held at the Palmer House, Chicago, on February 15 and 16.

The following physicians have been appointed as county health officers in their respective counties: Dr. J. C. Montgomery, Wichita, Sedgwick County; Dr. L. H. Sarchet, Caldwell, Sumner County; Dr. F. E. Dargatz, Kinsley, Edwards County; Dr. E. R. Beiderwell, Belleville, Republic County; Dr. S. B. Dykes, Esbon, Jewell County; Dr. E. M. Sutton, Salina, Saline County; Dr. W. L. Jacobus, Ottawa, Franklin County; Dr. R. F. Boyd, Cimarron, Gray County; Dr. J. G. Swails, Wathena, Doniphan County; and Dr. E. C. Moser. Holton, Jackson County.

Dr. G. B. McIlvain was appointed city health officer for Clay Center to fill the vacancy left by the death of Dr. Robert Algie. In Cherokee County Dr. C. C. Fuller was made county health officer following the death of Dr. H. H. Brookhart.

DEATH NOTICES

Dr. John T. Axtell, of Newton, 80 years of age, died at Inglewood. California, on February 20. Born in 1856, he studied medicine at the Bellevue Hospital Medical College, New York City, from which he was graduated in 1883. Shortly after he began practice in Harvey County where he founded the Axtell hospital. Dr. Axtell was a president of the Kansas Medical Society in 1911-12 and for years was active in Society work.

Dr. Ralph Cambern Henderson, 62 years of age. died at his home in Erie, on February 17. Dr. Henderson was born in 1875, at Osage Mission. He attended the Kansas City College of Medicine and the University of Kansas School of Medicine from which he was graduated in 1906. A member of the Neosho County Medical Society, he had practiced in the vicinity of Erie for thirty years.

Dr. Fred L. Holcomb, 59 years of age, died near his home in Coldwater following an automobile accident on January 31. Dr. Holcomb was born in 1877 and graduated from the Keokuk Medical College of Physicians and Surgeons in 1901. He practiced in Coldwater for thirty-five years and was outstanding in civic affairs. having held several offices pertaining to public health. Dr. Holcomb was a member of the Comanche County Medical Society at the time of his death.

Dr. Stanton Albert McCool, 53 years of age, was killed in an automobile collision near his home in Seneca on February 6. He was born in 1882 and graduated from Ensworth Medical College, St. Joseph, in 1908. He was a lieutenant-colonel in the Medical Reserve Corps of the United States Army and a member of the Nemaha County Medical Society. Dr. McCool had practiced in Seneca since 1925.

VITAMIN REQUIREMENTS OF MAN

I. VITAMIN C.

 Vitamin C is known to play an important role in human nutrition. Severe deficiency of this factor results in scurvy. It has been estimated by the Committee on Nutritional Problems of the American Public Health Association (1934) that the minimum daily intake of vitamin C (cevitamic acid) required to protect against scurvy increases from approximately 100 International units (5 mg. cevitamic acid) for the infant to 300 International units (15 mg. cevitamic acid) for the adult (1).

Vitamin C intake of this order of magnitude prevents the development of clinical scurvy, however, it is probably inadequate for optimum nutrition. Clear cut cases of scurvy seldom are seen in this country although some authorities believe that symptoms of a mild deficiency of vitamin C are not uncommon (2).

Referring to nutritional deficiency diseases in general it has been said that, "Almost every tissue in the body may be affected by a deficiency in a food factor" (3).

The tissues generally recognized as affected by deficiency of vitamin C are the endothelium of the blood vessels and the teeth. It has been suggested that to prevent the development of subclinical symptoms, a daily intake of 380 to 540 International units of vitamin C is required for a 130 pound adult (4).

Thus it would appear that the optimum in-

take of vitamin C is at least twice the amount required to protect against scurvy.

Data recently published demonstrate that the vitamin C content of human milk is dependent upon the vitamin C content of the maternal diet (5).

Hence when the diet of the lactating mother is low in vitamin C, this factor is also deficient in the milk.

The League of Nations Technical Commission recommends an intake of over 500 International units per day during pregnancy and lactation (6).

The inclusion in the diet of liberal quantities of fruits and vegetables, prepared in such a manner as to retain a major portion of the original vitamin C content, may be relied upon to supply the need for this vitamin. The value of commercially canned foods as anti-scorbutics has been repeatedly demonstrated during the past decade (7).

More recently, the vitamin C content of many commercially canned fruits and vegetables has been determined and the results expressed in International units (8).

Consideration of two factors, namely, the quantitative requirement of the human for vitamin C, and the vitamin C potencies of commercially canned fruits and vegetables, emphasizes the value of these protective foods as sources of vitamin C.

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(1) 1934-35. Am. Pub. Health Assn. Year Book. Page 71 (2) 1933. Chemistry of Food and Nu-trition. H. C. Sherman. 4th Ed. Page 421 MacMillan,

(3) 1936. J. Am. Med. Assn. 106, 261 (4) 1934, Nature 134, 569

(5) 1936. J. Nutrition 11, 599

(6) 1936. League of Nations Report on Physiological Bases of Nutrition, League of Na-tions Publication Department. Geneva.

(7) a. 1925. Ind. Eng. Cfiem. 17, 69 b. 1928. Ibid. 20, 202 c. 1933. Ibid. 25, 682 (8) a. 1935. J. Nutrition 9, 667 b. 1936. Ibid. 11, 383 c. 1936. Ibid. 12, 405

This is the twenty-second in a series of monthly articles, which will summarize, for your convenience, the conclusions about canned foods which authorities in nutritional research have reached. We want to make this series valuable to you, and so we ask your help. Will you tell us on a post card addressed to the American Can Company, New York, N. Y., what phases of canned foods knowledge are of greatest interest to you? Your suggestions will determine the subject matter of future articles.



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Physicians have been advised that protamine zinc insulin, is now available. The new form of treatment which this new preparation now makes possible has been declared the most notable advance in the treatment of diabetes since the discovery of insulin in 1921.

Protamine zinc insulin is slowly absorbed and the duration of action of a single dose is about three to six times that of unmodified insulin. For most patients, one injection a day is adequate. It is indicated chiefly in those diabetics particularly difficult to control with unmodified insulin because of the frequency of hypoglycemic reactions and the necessity for several daily injections of insulin. However, because it is slowly absorbed protamine zinc insulin is not recommended in cases of diabetic coma, in diabetes complicated by infection or in the event of surgical operation.

It is supplied in ten cubic centimeter vials ready for use. The preparation appears milky because the insulin is in suspension. Each cubic centimeter, after it has been brought into uniform suspension, contains forty units of insulin together with protamine and 0.08 mg. of zinc. Protamine zine insulin should be administered only subcutaneously.

RECURRENT INGUINAL HERNIA (Continued from page 105)

where sloughing of Poupart's ligament has occurred following infection at the time of a previous hernioplasty.

(The material for this paper is from the Hospital Division of the United States Public Health Service.)

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AUXILIARY

Edited by Mrs. W. G. Emery, Press Publicity Chairman

PRESIDENT'S MESSAGE

Recently I had a most interesting and pleasant trip. On February 8 it was my privilege to be a house guest of Dr. and Mrs. E. C. Duncan of Fredonia and guest at a dinner given in the evening at Neodesha by the Wilson County Medical Auxiliary. Mrs. W. R. Urie, presidentelect of Parents was also a guest.

The executive board of Sedgwick County gave a luncheon on February 9, preceding a business meeting at the home of Mrs. H. N. Tihen. Mrs. Duncan, a past president, Mrs. Urie. Mrs. F. L. Dennis, president of Ford County and myself were guests. We were house guests of Dr. and Mrs. E. J. Nodurfth. On February 10, Wednesday, in the afternoon, the members of Sedgwick County Medical Auxiliary were our hostesses at a tea given in the home of Mrs. E. D. Carter.

I made a trip to Dodge City on February 10 with Mrs. E. J. Nodurfth, a past president, and Mrs. Dennis, where we were entertained in the home of Dr. and Mrs. Dennis. The Ford County Medical Auxiliary entertained with a bridge party on Thursday evening for Mrs. Nodurfth and myself in the home of Mrs. X. F. Alexander, Mrs. Frank Coffey, state treasurer and Mrs. Nodurfth and myself were honor guests at a dinner and meeting of the Ford County Auxiliary on Friday evening, February 12.

On Saturday I went to Hays with Mrs. Coffey where I was entertained at a luncheon by the members of the Central Kansas Medical Auxiliary:

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N. Y. State Jour. Med., June 1935, Vol. 35, No. 11
Arch. Otolaryngology, Mar. 1936, Vol. 23, No. 3, 306-309

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Originator, Owner and Maker 1701 Diamond St. Philadelphia I value very highly the contacts it was my privilege to make with the women of the various auxiliaries with whom I could meet and discuss the ambitions, problems and achievements of the Women's Auxiliary to the Kansas State Medical Society. I was deeply impressed with the enthusiasm, interest and spirit of harmony prevailing among the women of the various auxiliaries.

Mrs. L. B. Gloyne, President, Kansas Medical Auxiliary.

"Oh. my!" mourned a national chairman, "I have so many ladies who are chairmen or on committees of hospitality, room, thrift, etc., and so few participate in health activities of their clubs. Although we sing the song to them continually".

More than one active auxiliary worker has bemoaned this condition. The average physician's wife can secure the committee appointments which she desires. Doesn't she think scientific medicine worth fighting for? Doesn't she think that the principles of health conservation worth adoption unhandicapped by cultist interference? Truth may be mighty, but it needs a heap of help, often. in order to prevail.

A supply of folders from the national public relations committee has been mailed to the state chairmen of public relations. The folders contain suggestions for cooperation between medical auxiliaries and parent teachers associations in the summer round-up of children. Since this list of suggestions advocates methods of benefit to the doctors as well as to the public it merits earnest consideration.

Auxiliary news is now being published in the Journal of The American Medical Association. By publishing news of the several state auxiliaries weekly it is hoped to stimulate interest in the auxiliary in both organized and unorganized states. It is also expected to result in more intimate acquaintance of the state auxiliaries one with another. Kansas was given a flattering amount of space recently.

Auxiliary members should ask their doctors to bring home the A. M. Å. Journal.

Dr. Fishbein, editor of The Journal, is anxious to know the reaction of the auxiliary members to this new department. Will not county auxiliary secretaries write this column, informing us of the interest in the auxiliary department of The A. M. A. Journal, so that we may pass the sentiment on to the national press and publicity chairman?

Sedgwick County Auxiliary's entertainment for Mrs. L. B. Gloyne on her official visit was a valentine tea. Mrs. Gloyne's address was entitled "The Friendly Auxiliary". Dr. R. A. West, the guest speaker, spoke on "The History of Obstetrics". Music for the afternoon was furnished by Muriel Larson, pianist.

Mrs. W. J. Bierman has resigned her office as public relations chairman of the Sedgwick County Auxiliary. During her administration the Auxiliary assisted at the Medical Society's booth at the Kansas Diamond Jubilee. Members were assigned to the detail work of dispatching Christmas seals, and forty-seven letters were sent to various women's organizations in Wichita notifying them of the speakers bureau of the medical society.

News of the intensive work of the Labette County Auxiliary is inspiring. Their work for basic science law could come only after close organization and careful planning. The auxiliary sent petitions with an explanation of basic science to the fifteen federated study clubs of Parsons as well as to several other influential womens' organizations of that city. These clubs were asked to give the subject careful consideration and to sign the petition and forward it to their representatives and senator in Topeka. All clubs except three complied with the request. In other communities of the county willing aid in this work was found in various clubs and individuals. Other departments of auxiliary work were by no means neglected. Mrs. N. C. Morrow, public relations chairman, secured Dr. R. H. Reidel, Topeka, as speaker for a P, T. A. meeting, his subject being "Syphilis". Local physicians will follow on future P. T. A. programs. The members assisted with the work of tuberculin tests. 1912 tests were given with 315 positive reactions.

At the postponed meeting February 4, business features were the principal discussion. Mrs. Blasdel gave a splendid paper, entitled "Our Health".

Mrs. T. D. Blasdel, state Hygeia chairman, announces that to date 168 subscriptions to Hygeia have been reported. Brown County subscribed its quota, thirteen. Labette doubled its quota with twenty-six. Sedgwick subscribed for 111 copies exceeding its quota by thirty-seven. All other counties are behind their quotas, while three counties have failed to report any subscriptions. The Kansas quota is 242. Surely seventy-four more subscriptions are obtainable.

Ford County reports that the graduate nurses of St. Anthony's Hospital, Dodge City, were guests of honor at a musical tea given at the home of Dr. and Mrs. F. L. Dennis January 22, by the Ford County Auxiliary.

Wyandotte County Auxiliary met February 5, at the Gould Hotel, Kansas City. After a valentine luncheon, business was given right of way. Reports of accomplishments were heard. Other annual reports indicated an active organization. Election of officers resulted as follows: president, Mrs. C. Omer West: vice president, Mrs. M. A. Walker; secretary, Mrs. H. L. Regier; treasurer, Mrs. E. G. Neighbor.

At the luncheon at Hays, given in honor of Mrs. L. B. Gloyne, by the Central Kansas Auxiliary at the Hotel Lamar, corsage bouquets were presented to Mrs. Gloyne, state president; Mrs. E. J. Nodurfth, state historian; Mrs. F. E. Coffey, state treasurer. The tables carried valentine decorations of red and white.

All state chairmen are notified that all reports must be received by the state president not later than April 1.

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JAMES Y. SIMPSON, M.D. Neurologist and Addictologist HERMAN S. MAJOR, M.D. Neuro-Psychiatrist

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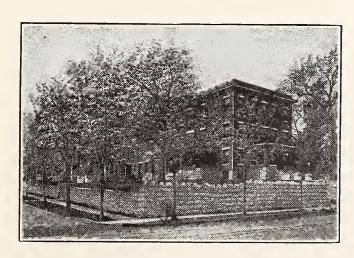
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Diet

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Diseases

Selected

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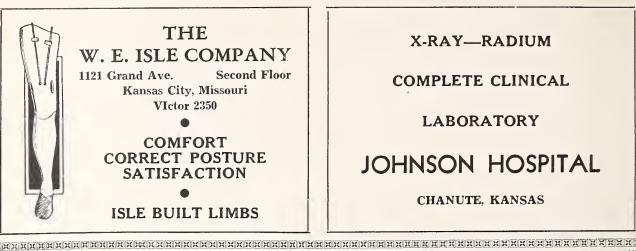
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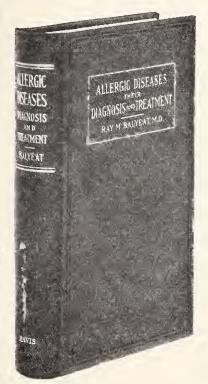
Rates and Folder on request E. W. STOKES, M.D., Medical Director, 923 Cherokee Road, Louisville, Ky.

FOURTH EDITION

REVISED and ENLARGED

BALYEAT'S ALLERGIC DISEASES

Their Diagnosis and Treatment



A Practical Treatise for the General Practitioner on Allergic Diseases—Asthma, Seasonal Hay Fever, Perennial Hay Fever, Migraine, Urticaria, Certain Forms of Eczema, Contact Dermatitis, and Gastro—Intestinal Symptoms Due to Allergy.

BY

RAY M. BALYEAT, M.A., M.D., F.A.C.P.

Associate Professor of Medicine and Lecturer on Diseases Due to Allergy, University of Oklahoma Medical School; Chief of the Allergy Clinic, University Hospital; Consulting Physician of St. Anthony's Hospital and to the State University Hospital; President of the Association for the Study of Allergy 1930-1931; Director, Balyeat Hay Fever and Asthma Clinic.

ASSISTED BY

RALPH BOWEN, B.A., M.D., F.A.A.P

Chief of Pediatric Section Balyeat Hay Fever and Asthma Clinic Oklahoma City, Oklahoma

Five hundred and sixteen pages, 6x9, illustrated with 132 engravings, line drawings, and charts, and 8 colored plates. Fourth Revised and Enlarged Edition. Price, cloth binding, \$6.00.

NEW FEATURES OF THE BOOK: Many of the 41 chapters deal with the newer phases of allergy. The following list comprises some of the new chapters:

Chapter	
XXXI.	The Therapeutic Value of the Intratracheal Use of Iodized Oil Combined with Eliminative
	Measures and Specific Desensitization in the Treatment of Intractable Asthma.
XXXV.	Gastrointestinal Allergy.
XXXVIII.	Allegric Dermatoses (I. Eczema, II. Contact Dermatitis).
	Drug Therapy as a Palliative Means in the Treatment of Hay Fever and Asthma.
XXXVI.	Migraine.
XXXVII.	Urticaria Hives).
XXXIV.	Fungus Infection and Its Allergic Phase.
XXXIV.	Allergic Conjunctivitis.
XLI.	Eliminative Measures in the Treatment of Food-Sensitive Patients.
XXVII.	Eliminative Measures and Desensitizing Methods in the Treatment of House-Dust-Sensitive
	Patients.
XX.	Facial and Dental Deformaties Due to Perennial Nasal Allergy in Childhood.
	XXXI. XXXV. XXXVIII. XXX. XXXVII. XXXIV. XXXIV. XXIII. XXVIII.

This book offers the physician a guide to the practical methods of the diagnosis and treatment of allergic diseases. The material is arranged primarily to make available to the general practitioner the approved diagnostic and therapeutic procedures dealing with allergic diseases. It is the work of an experienced teacher and a pioneer in the study and treatment of diseases due to allergy.

		_					
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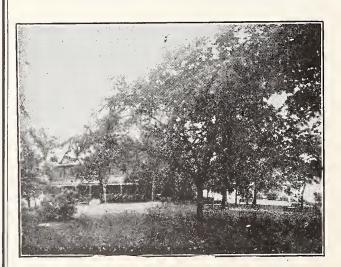
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E. F. DeVILBISS, M.D., Supt. OFFICE, 1124 PROFESSIONAL BLDG., KANSAS CITY, MO.

THE JOURNAL

of the

Kansas Medical Society

VOL. XXXVIII

APRIL, 1937

No. 4

SCHEDULE OF EVENTS 78TH ANNUAL SESSION THE KANSAS MEDICAL SOCIETY TOPEKA, MAY 3, 4, 5, 6,

MONDAY MAY 3

- 8:30 A. M. TOURNAMENT KANSAS MEDICAL GOLFING ASSOCIATION
 Shawnee Country Club
 (One and one-half miles east of Topeka Boulevard on Twenty-ninth Street)
- 8:30 A. M. TOURNAMENT KANSAS MEDICAL TRAPSHOOTING ASSOCIATION
 Izaac Walton League Club
 (Follow signs east on Highway 40 or from Shawnee Country Club)
- 6:30 P. M. STAG BANQUET FOR GOLFERS AND TRAPSHOOTERS Shawnee Country Club

TUESDAY MAY 4

- 8:00 A. M. REGISTRATION to Entrance Lobby Masonic Temple 6:00 P. M.
- 8:00 A. M. OPENING OF SCIENTIFIC AND TECHNICAL EXHIBITS Grand Lobby Masonic Temple
- 8:30 A. M. PRESIDING OFFICERS MORNING SESSIONS
 LODGE ROOM A—H. S. O'Donnell, M.D., Ellsworth
 LODGE ROOM B—E. R. Cheney, M.D., Salina
 MAIN AUDITORIUM—E. M. Ireland, M.D., Coats
- 8:30 A. M. SURGERY OF GLAUCOMA

 MEYER WIENER, M.D., ST. LOUIS, MISSOURI
 Lodge Room B Second Floor Masonic Temple
- 8:30 A. M. THE MANAGEMENT OF ABORTIONS

 E. D. PLASS, M.D., IOWA CITY, IOWA

 Lodge Room A First Floor Masonic Temple

The more common causes of spontaneous abortion with differentiation between fundamental and exciting factors. The diagnosis and treatment of inevitable

abortion. Habitual abortion as possibly a manifestation of endocrine imbalance. Logical methods for treating threatened abortion. The conservative management of infected incomplete abortion. The problem of criminal abortion and of the therapeutic interruption of pregnancy.

INTRODUCTION: R. A. West, M.D., Wichita DISCUSSION: H. V. Holter, M.D., Kansas City

8:30 A. M. STREPTOCOCCAL DERMATOSES

J. H. MITCHELL, M.D., CHICAGO, ILLINOIS

Main Auditorium First Floor Masonic Temple

A lantern demonstration and discussion of the cutaneous disease produced by the streptococci. The differences in the behavior on the skin of the streptococci and the staphylococcus will be set forth. The technique of the culture of streptococci will be described. Streptococcus infections of the hands and feet simulating ringworm will be differentiated. Streptococcus infections about the ears and scalp will be differentiated from seborrheic dermatitis. Streptococcus pyoderma and its complications will be described. (Note—An exhibit of mounted photographs will be on view).

INTRODUCTION: Harold Chapman, M.D., Speed DISCUSSION: E. H. Decker, M.D., Topeka

9:20 A. M. INTERMISSION

9:30 A. M. SINUS DISEASE IN CHILDREN

T. E. CARMODY, D.D.S., M.D., DENVER, COLORADO Lodge Room B Second Floor Masonic Temple

9:30 A. M. CANCER OF THE COLON

C. F. DIXON, M.D., ROCHESTER, MINNESOTA Lodge Room A First Floor Masonic Temple INTRODUCTION: C. E. McCarty, M.D., Dodge City DISCUSSION: H. W. Horn, M.D., Wichita

9:30 A. M. HYPERINSULINISM

ROBERT JEFFRIES, M.D., ATCHISON

Main Auditorium First Floor Masonic Temple

A report of a case with comment on current literature on the subject.

INTRODUCTION: H. O. Bullock, M.D., Independence DISCUSSION: H. J. Stacey, M.D., Leavenworth

10:20 A. M. INTERMISSION

10:30 A. M. MEDICAL OPHTHALMOLOGY

MEYER WIENER, M.D., ST. LOUIS, MISSOURI Lodge Room B Second Floor Masonic Temple

10:30 A. M. THE MANAGEMENT OF INJURIES OF THE FACE AND JAWS WITH SPECIAL REFERENCE TO THE COMMON AUTOMOBILE INJURY

EARL C. PADGETT, M.D., KANSAS CITY, MISSOURI Lodge Room A First Floor Masonic Temple

An observation of a considerable number of severe injuries of the face and jaws has led to the conclusion that very often a great deal of deformity may be prevented after an injury if the patient is given proper immediate care. Thus the proper care of both the soft tissues and the hard tissues immediately after injury will be discussed. A series of cases will be presented which illustrate the various procedures which may be used to correct the blemishes and deformities which may result from severe injuries. Intermediate care also will be touched upon. Lantern slides of diagrams and photographs and plaster casts to illustrate various appliances and surgical procedures used in correction of these cases.

INTRODUCTION: R. R. Melton, M.D., Marion DISCUSSION: L. S. Nelson, M.D., Salina

10:30 A. M. FUNGOUS DISEASES OF THE SKIN

J. H. MITCHELL, M.D., CHICAGO, ILLINOIS

Main Auditorium First Floor Masonic Temple

A lantern demonstration and discussion of the diseases of the skin and its appendages produced by the fungi. Differentation of the various types of ringworm of the scalp, nails and skin will be made. Technique of the microscopical demonstration and culture of the fungi will be described. (Note—An exhibit of mounted photographs will be on view).

DISCUSSION: J. V. Van Cleve, M.D., Wichita

12:00 Noon SECTION ON OPHTHALMOLOGY AND OTOLARYNGOLOGY

ROUND TABLE LUNCHEON

HOTEL KANSAN ASSEMBLY ROOM

Guests: T. E. Carmody, D.D.S., M.D., Denver, Colorado

Meyer Wiener, M.D., St. Louis, Missouri

PRESIDING: L. S. Powell, M.D., Lawrence

12:00 Noon SECTION ON OBSTETRICS

ROUND TABLE LUNCHEON

HOTEL KANSAN ROOF GARDEN

Guests: E. D. Plass, M.D., Iowa City, Iowa

L. A. Calkins, M.D., Kansas City, Missouri

PRESIDING: H. M. Glover, M.D., Newton

12:00 Noon SECTION ON SURGERY

ROUND TABLE LUNCHEON

HOTEL JAYHAWK ROOF GARDEN

Guests: C. F. Dixon, M.D., Rochester, Minnesota

Earl C. Padgett, M.D., Kansas City, Missouri

PRESIDING: A. R. Hatcher, M.D., Wellington

12:00 Noon SECTION ON DERMATOLOGY

ROUND TABLE LUNCHEON

HOTEL JAYHAWK FLORENTINE ROOM

Guest: J. H. Mitchell, M.D., Chicago, Illinois

PRESIDING: F. A. Trump, M.D., Ottawa

GENERAL SESSION Main Auditorium First Floor Masonic Temple

PRESIDING: H. L. Snyder, M.D., Winfield

2:00 P. M. ADDRESS OF WELCOME

EARLE G. BROWN, M.D., TOPEKA
President Shawnee County Medical Society

2:05 P. M. PRESIDENT'S ADDRESS

H. L. SNYDER, M.D., WINFIELD

2:30 P. M. LIMITATIONS IN OPHTHALMOLOGY FOR THE MAN IN GENERAL PRACTICE

MEYER WIENER, M.D., ST. LOUIS, MISSOURI INTRODUCTION: E. R. Cheney, M.D., Salina

2:50 P. M. INTERMISSION

3:00 P. M. ACUTE ABDOMINAL DISEASE

C. F. DIXON, M.D., ROCHESTER, MINNESOTA INTRODUCTION: C. E. Joss, M.D., Topeka

4:00 P. M. IMPORTANT PROBLEMS IN PRENATAL CARE

E. D. PLASS, M.D., IOWA CITY, IOWA

While complete care of prenatal patients is essential, special emphasis upon practical pelvic mensuration, the detection of early signs of the toxemias of late pregnancy, and importance of venereal disease, especially syphilis, in the pregnant woman.

INTRODUCTION: L. A. Calkins, M.D., Kansas City, Missouri

3:00 P. M. INFECTIONS OF THE FLOOR OF THE MOUTH AND NECK

T. E. CARMODY, D.D.S., M.D., DENVER, COLORADO

Lodge Room B Second Floor Masonic Temple PRESIDING: L. S. Powell, M.D., Lawrence

4:00 P. M. PROGRESSIVE MYOPIA

MEYER WIENER, M.D., ST. LOUIS, MISSOURI Lodge Room B Second Floor Masonic Temple INTRODUCTION: L. S. Powell, M.D., Lawrence

6:30 P. M. ALUMNI BANQUETS

(See Page 157 For Schedule of Meeting Placess)

8:00 P. M. HOUSE OF DELEGATES MEETING HOTEL JAYHAWK CONVENTION HALL

WEDNESDAY MAY 5

8:00 A. M. REGISTRATION

to Entrance Lobby Masonic Temple 6:00 P. M.

8:30 A. M. PRESIDING OFFICERS MORNING SESSIONS

LODGE ROOM A—R. O. Crume, M.D., Fort Scott LODGE ROOM B—L. S. Powell, M.D., Lawrence MAIN AUDITORIUM—H. B. Vallette, M.D., Beloit

8:30 A. M. SURGERY OF THE TEAR SAC

MEYER WIENER, M.D., ST. LOUIS, MISSOURI Lodge Room B Second Floor Masonic Temple

8:30 A. M. HYPERTENSIVE HEART DISEASE

W. M. KETCHAM, M.D., KANSAS CITY, MISSOURI

Main Auditorium Masonic Temple

The importance and frequency of this disease entity is stressed. Slides to show the typical appearance of the blood vessels and the characteristic x-ray and electrocardiographic findings. Discussion of etiology, pathological findings, symptoms, physical findings, prognostic data and treatment. Slides.

INTRODUCTION: R. G. Ball, M.D., Manhattan DISCUSSION: P. W. Morgan, M.D., Emporia

8:30 A. M. DIAGNOSIS AND TREATMENT OF BREAST CANCERS

T. G. ORR, M.D., KANSAS CITY

G. M. TICE, M.D., KANSAS CITY

Lodge Room A First Floor Masonic Temple

INTRODUCTION: F. H. Relihan, M.D., Smith Center

DISCUSSION: R. B. Stewart, M.D., Topeka

9:20 A. M. INTERMISSION

9:30 A. M. RELATION OF DENTISTRY TO OTOLARYNGOLOGY

T. E. CARMODY, D.D.S., M.D., DENVER, COLORADO Lodge Room B Second Floor Masonic Temple

9:30 A. M. CLINICAL APPROACH TO THE RHEUMATIC PROBLEM

RUSSELL L. HADEN, M.D., CLEVELAND, OHIO

Main Auditorium First Floor Masonic Temple

INTRODUCTION: H. W. Palmer, M.D., Scott City

DISCUSSION: H. N. Tihen, M.D., Wichita

9:30 A. M. REGIONAL ENTERITIS

ARNOLD JACKSON, M.D., MADISON, WISCONSIN

Lodge Room A First Floor Masonic Temple

The 219 cases appearing in American literature since first designated by Crohn-in 1932. Importance of not mistaking for appendicitis. Commonly found in young adults. Acute and chronic forms. Symptoms. Determination of diagnosis dependent upon roentgenologist. Various conditions to be considered in the differential diagnosis. Variation in pathological findings according to stage of disease. Question of surgical treatment.

INTRODUCTION: W. C. Heaston, M.D., McPherson DISCUSSION: C. C. Nesselrode, M.D., Kaansas City

10:20 A.M. INTERMISSION

10:30 A. M. ENUCLEATION-EVISCERATION

AND LATE IMPLANTATIONS

MEYER WIENER, M.D., ST. LOUIS, MISSOURI

Lodge Room B Second Floor Masonic Temple

10:30 A. M. PROGRESS IN THE TREATMENT OF MENINGOCOCCIC

MENINGITIS

ARCHIBALD HOYNE, M.D., CHICAGO, ILLINOIS

Main Auditorium First Floor Masonic Temple

INTRODUCTION: A. C. Eitzen, M.D., Hillsboro

DISCUSSION: R. Canuteson, M.D., Lawrence

10:30 A. M. THE DIABETIC AS A SURGICAL AND AN OBSTETRICAL RISK

ELLIOTT P. JOSLIN, M.D., BOSTON, MASSACHUSETTS

Lodge Room A First Floor Masonic Temple

INTRODUCTION: J. H. A. Peck, M.D., St. Francis

DISCUSSION: J. M. Porter, M.D., Concordia

12:00 Noon SECRETARIES' LUNCHEON

NORMAN'S CAFE

726 Kansas Avenue

12:00 Noon SECTION ON OPHTHALMOLOGY AND OTOLARYNGOLOGY

ROUND TABLE LUNCHEON

HOTEL KANSAN KANSAN ROOM

Guests: T. E. Carmody, D.D.S., M.D., Denver, Colorado

Meyer Wiener, M.D., St. Louis, Missouri

PRESIDING: E. R. Cheney, M.D., Salina

12:00 Noon SECTION ON SURGERY

ROUND TABLE LUNCHEON

HOTEL JAYHAWK CONVENTION HALL

Guests: A. S. Jackson, M.D., Madison, Wisconsin

T. G. Orr, M.D., Kansas City

G. M. Tice, M.D., Kansas City

PRESIDING: W. M. Mills, M.D., Topeka

12:00 Noon SECTION ON CONTAGION

ROUND TABLE LUNCHEON

HOTEL KANSAN ASSEMBLY ROOM

Guests: Archibald Hoyne, M.D., Chicago, Illinois

PRESIDING: B. I. Krehbiel, M.D., Topeka

12:00 Noon SECTION ON DIABETIC MANAGEMENT

ROUND TABLE LUNCHEON

HOTEL KANSAS ROOF GARDEN

Guest: Elliott P. Joslin, M.D., Boston, Massachusetts

PRESIDING: J. M. Porter, M.D., Concordia

12:00 Noon SECTION ON MEDICINE

ROUND TABLE LUNCHEON

HOTEL JAYHAWK GREEN ROOM

Guest: Russell L. Haden, M.D., Cleveland, Ohio PRESIDING: N. P. Sherwood, M.D., Lawrence

GENERAL SESSION Main Auditorium Masonic Temple

PRESIDING: H. L. Snyder, M.D., Winfield

2:00 P.M. IS THE MODERN CONCEPT OF SINUS DISEASE CHANGING

T. E. CARMODY, D.D.S., M.D., DENVER, COLORADO INTRODUCTION: L. S. Powell, M.D., Lawrence

2:50 P. M. INTERMISSION

3:00 P. M. CLINICAL AND NUTRITIONAL DEFICIENCY DISEASE

RUSSELL L. HADEN, M.D., CLEVELAND, OHIO INTRODUCTION: A. J. Revell, M.D., Pittsburg

3:45 P. M. REPORT OF NECROLOGY COMMITTEE

4.00 P. M. DIABETES IN CHILDREN

ELLIOTT P. JOSLIN, M.D., BOSTON, MASSACHUSETTS INTRODUCTION: I. R. Burket, M.D., Ashland

3:00 P.M. TREATMENT OF CORNEAL ULCERS

MEYER WIENER, M.D., ST. LOUIS, MISSOURI Lodge Room B Second Floor Masonic Temple PRESIDING: E. R. Cheney, M.D., Salina

6:30 P. M. ANNUAL BANQUET FOR MEMBERS AND GUESTS

Topeka High School

GUESTS: PAST PRESIDENTS OF THE SOCIETY

Toastmaster: H. L. Snyder, M.D., Winfield

9:00 P. M. DANCE

Hotel Jayhawk Roof Garden

THURSDAY MAY 6

8:00 A. M. HOUSE OF DELEGATES MEETING

Hotel Jayhawk Convention Hall

8:00 A. M. KANSAS BRANCH NATIONAL MEDICAL WOMEN'S ASSOCIATION

BREAKFAST

Hotel Jayhawk

All medical women attending meeting cordially invited.

CHAIRMAN: Elvenor Ernest, M.D., Topeka

8:00 A. M. REGISTRATION

to Entrance Lobby Masonic Temple

6:00 P. M.

8:30 A. M. PRESIDING OFFICERS MORNING SESSIONS

LODGE ROOM A—C. D. Blake, M.D., Hays LODGE ROOM B—C. W. Reynolds, M.D., Holton MAIN AUDITORIUM—D. N. Medearis, M.D., Kansas City

8:30 A. M. ALLERGY IN CHILDREN

HERBERT J. RINKEL, M.D., KANSAS CITY, MISSOURI Main Auditorium First Floor Masonic Temple

Essential findings in clinically controlled allergic infants. Allergic child does not differ materially from the adult. The diagnostic problem in eczema, vasomotor rhinitis and asthma. A resume of the actual proved sensitizations in several hundred cases compared with a like number of adults to indicate useful findings in children.

INTRODUCTION: A. P. Brown, M.D., Osborne DISCUSSION: A. O. Olson, M.D., Wichita

8:30 A. M. TREATMENT OF ELBOW AND WRIST FRACTURES

J. ALBERT KEY, M.D., ST. LOUIS, MISSOURI

Lodge Room A First Floor Masonic Temple

The more common fractures of the elbow and wrist considered from a practical standpoint emphasizing complications apt to occur in treatment of fractures of elbow and difficulties apt to be encountered in treatment of fractures near wrist.

INTRODUCTION: M. Newman, M.D., Axtel DISCUSSION: C. R. Rombold, M.D., Wichita

9:20 A. M. INTERMISSION

9:30 A.M. RECENT ADVANCES IN NUTRITION

P. C. JEANS, M.D., IOWA CITY, IOWA

Main Auditorium First Floor Masonic Temple

The average diet is unsatisfactory as evidenced by the prevalence of dental caries and other things. Discussion of individual components of a good diet with detailed mention of materials likely to be lacking. Recently developed knowledge with some older as a background.

INTRODUCTION: W. R. Dillingham, M.D., Salina DISCUSSION: F. L. Menehan, M.D., Wichita

9:30 A. M. A REPORT OF SIXTY CONSECUTIVE INTRAPLEURAL PNEUMOLYSES

C. F. TAYLOR, M.D., NORTON

Lodge Room B Second Floor Masonic Temple INTRODUCTION: J. H. Dittemore, M.D., Belleville DISCUSSION: Harold H. Jones, M.D., Winfield

9:30 A. M. UTERINE BLEEDING AFTER FORTY

C. A. HELLWIG, M.D., WICHITA

Lodge Room A First Floor Masonic Temple
INTRODUCTION: W. F. Schroeder, M.D., Newton
DISCUSSION: J. B. Nanninga, M.D., Goessel

10:20 A. M. INTERMISSION

10:30 A. M. TREATMENT OF ENDOCRINE DISEASE IN CHILDHOOD

W. M. KETCHAM, M.D., KANSAS CITY, MISSOURI Main Auditorium First Floor Masonic Temple

Fourteen years of observation of endocrine diseases in childhood. Special attention to diagnosis and treatment and particularly to importance of x-ray examinations for age in all suspected glandular cases. Slides illustrating clinical and x-ray findings. Treatment in detail.

INTRODUCTION: J. A. Woodmansee, M.D., Emporia

DISCUSSION: P. M. Krall, M.D., Kansas City

10:30 A.M. THE RELATION OF LIFE INSURANCE TO MEDICAL PRACTICE

W. E. THORNTON, M.D., FORT WAYNE, INDIANA

Lodge Room B Second Floor Masonic Temple

The place life insurance occupies in medical economics and its contribution to general medicine. The history of medico insurance and relationship. The nature of current life insurance medicine. Pre-clinical and post-clinical impairments. Statistical method in medical research. What is "normal". The group as unit of mortality. Economic and business factors. Applicant vs. patient. Ordinary and special examinations. Future of insurance medicine.

INTRODUCTION: O. D. Walker, M.D., Salina

DISCUSSION: M. B. Miller, Topeka

10.30 A. M. NEWER METHODS OF TREATMENT OF FRACTURES OF THE HIP J. ALBERT KEY, M.D., ST. LOUIS, MISSOURI

During the past few years improvement in technique and newer operative methods have considerably decreased mortality in intracapsular fractures of the hip and have increased probability of union in those injuries. High mortality and methods of treatment for intertrochanteric fractures.

DISCUSSION: M. E. Pustiz, M.D., Topeka

12.00 Noon SECTION ON ORTHOPEDIC SURGERY

ROUND TABLE LUNCHEON

HOTEL JAYHAWK FLORENTINE ROOM

Guest: J. Albert Key, M.D., St. Louis, Missouri PRESIDING: E. E. Morrison, M.D., Great Bend

12:00 Noon SECTION ON PEDIATRICS

ROUND TABLE LUNCHEON

HOTEL KANSAN ASSEMBLY ROOM

Guest: P. C. Jeans, M.D., Iowa City, Iowa PRESIDING: E. G. Padfield, M.D., Salina

GENERAL SESSION Main Auditorium First Floor Masonic Temple

PRESIDING: H. L. Snyder, M.D., Winfield

2:00 P. M. THE DIAGNOSTIC PROBLEM IN FOOD ALLERGY

HERBERT J. RINKEL, M.D., KANSAS CITY, MISSOURI

Diagnosis begun with skin tests—approximate accuracy fifty percent. Other diagnostic measures necessary, clinical and laboratory. Digestive leukocyte response substantiated by clinical observations and interpreted upon basis of known physiological and immunological reactions of food. Second problem in diagnosis of food allergy—food sensitizations are not fixed but show definite cycles. This variation produced by definite controllable factors. This problem as related to food allergy.

INTRODUCTION: G. E. Paine, M.D., Hutchinson

2:50 P. M. INTERMISSION

3:00 P. M. CONGENITAL SYPHILIS

P. C. JEANS, M.D., IOWA CITY, IOWA

Transmission of syphilis to the child. Incidence. Familiar effects. Difference between congenital and acquired syphilis. Neurosyphilis, Diagnosis. Treatment. INTRODUCTION: H. H. Jones, M.D., Winfield

4:00 P. M. PROPHYLAXIS AND TREATMENT OF SCARLET FEVER

ARCHIBALD HOYNE, M.D., CHICAGO, ILLINOIS

INTRODUCTION: H. M. Beatson, M.D., Arkansas City



THOMAS EDWARD CARMODY, D.D.S., M.D. DENVER, COLORADO

Chief Oral Surgeon and Broacha:copist, Children's Hospital, Denver, Colorado.

DEGREES: D.D.S., University of Michigan, 1898; M.D., Denver and Gross College of Medicine, 1903.

SPECIALTY: Oral Surgery, Oto-Laryngology and Bronchoscopy.

MEMBER: American College of Surgeons; American Academy of Ophthalmology and Oto-Laryngology; American Society of Oral and Plastic Surgery; American Bronchoscopic Society; American Laryngological Association; American Laryngological, Rhinological and Otological Society; American Medical Association.

CLAUDE F. DIXON, M.D. ROCHESTER, MINNESOTA

Chief of Surgical Section, Mayo Clinic, Rochester, Minnesota; Associate Professor of Surgery, Graduate School, University of Minnesota (Mayo Foundation).

DEGREES: M.D., University of Kansas School of Medicine, 1921.

SPECIALTY: Surgery.

MEMBER: American College of Surgeons; Western Surgical Association, American Medical Association.





RUSSELL L. HADEN, M.D. CLEVELAND, OHIO

Head of The Department of Medicine, Cleveland Clinic, Cleveland, Ohio.

DEGREES: M.D., Johns Hopkins University, 1915.

SPECIALTY: Internal Medicine.

MEMBER: American Medical Association; American Association Pathology and Bacteriology; American Society for Clinical Investigation; American Clinical and Climatological Association; Association of American Physicians; Central Society for Clinical Research.



ARCHIBALD L. HOYNE, M.D.

CHICAGO, ILLINOIS

Clinical Professor of Pediatrics, Rush Medical College, University of Chicago; Associate Clinical Professor of Pediatrics, The School of Medicine, The Division of the Biological Sciences, University of Chicago; Chief of the Contagious Disease Department, Cook County Hospital, Chicago, Illinois; Medical Superintendent of the Municipal Contagious Disease Hospital, Chicago, Illinois.

DEGREES: M.D., Rush Medical College, 1904.

SPECIALTY: Pediatrics.

MEMBER: American Medical Association; American Academy of Pediatrics;

American College of Physicians.

ARNOLD S. JACKSON, M.D.

MADISON, WISCONSIN

Attending Surgeon Methodist Hospital and Jackson Clinic, Madison.

DEGREES: M.D., Columbia Medical College of Physicians and Surgeons;

M.S. in Surgery, University of Wisconsin.

SPECIALTY: Surgery.

MEMBER: American College of Surgeons; Western Surgical Association; The American Society for the Study of Goiter; Wisconsin Clinical Surgical Society; The Milwaukee Society of Clinical Surgery; American Medical Association.





PHILIP C. JEANS, M.D.

IOWA CITY, IOWA

Professor of Pediatrics, University of Iowa.

DEGREES: M.D., Johns Hopkins University, 1909.

SPECIALTY: Pediatrics.

MEMBER: Council on Foods of The American Medical Association; American Pediatric Society; Society for Experimental Biology and Medicine; Society for Pediatric Research; American Institute of Nutrition; Society for Pediatric Research; American Institute of Nutrition; Society for Research in Child Development; American Medical Association.



ROBERT CHARLES JEFFRIES, M.D.

ATCHISON, KANSAS

DEGREES: M.D., University of Kansas School of Medicine, 1933.

MEMBER: American Medical Association.

W. MERRITT KETCHAM, M.D. KANSAS CITY, MISSOURI

Chief of the Electrocardiographic Department of St. Joseph's Hospital, Kansas City, Missouri.

DEGREES: M.D., Georgetown University School of Medicine, 1920; Cardiac Studies, National Heart Hospital, London, England, Harvard and Michigan Universities.

SPECIALTY: Internal Medicine (Endocrinology and Cardiology).

MEMBER: American Medical Association.





J. ALBERT KEY, M.D. St. Louis, Missouri

Clinical Professor of Orthopedic Surgery, Washington University.

DEGREES: M.D., Johns Hopkins University, 1918.

SPECIALTY: Orthopedic Surgery.

MEMBER: American Orthopaedic Association; American Proctologic Society; Clinical Orthopaedic Society; American Academy of Orthopaedic Surgeons; American Association of Anatomists; American Medical Association.

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ANNUAL SESSION - - Speakers



THOMAS G. ORR, M.D.

KANSAS CITY, KANSAS

Professor of Surgery, University of Kansas School of Medicine; Surgeon-in-Chief to the University of Kansas Hospitals.

DEGREES: M.D., Johns Hopkins University, 1910.

SPECIALTY: Surgery.

MEMBER: American Board of Surgery; American College of Surgeons; Western Surgical Association; American Surgical Association; American

Medical Association.

EARL C. PADGETT, M.D.

KANSAS CITY, MISSOURI

Associate Professor of Surgery, University of Kansas Medical School.

DEGREES: M.D., Washington University, 1918.

SPECIALTY: Surgery.

MEMBER: Western Surgical Association; American College of Surgeons;

American Medical Association.





E. D. PLASS, M.D.

IOWA CITY, IOWA

Professor of Obstetrics, Gynecology and Abdominal Surgery, University of Iowa.

DEGREES: M.D., Johns Hopkins University, 1911.

SPECIALTY: Obstetrics and Gynecology.

MEMBER: American Board of Obstetrics and Gynecologists; Secretary Section on Obstetrics, Gynecology and Abdominal Surgery of The American Medical Association; American Gynecological Society; American Association of Obstetricians, Gynecologists and Abdominal Surgeons; Chicago Gynecological Society; Detroit Obstetrical and Gynecological Society; Central Association of Obstetricians and Gynecologists; American Society of Biological Chemists; Society for Experimental Biology and Medicine; American Neisserian Medical Society; National Board of Medical Examiners.



HERBERT J. RINKEL, M.D. Kansas City, Missouri

DEGREES: M.D., Northwestern University, 1925.

SPECIALTY: Internal Medicine (The Allergic Diseases).

MEMBER: American Medical Association.

C. F. TAYLOR, M.D. Norton, Kansas

Medical Superintendent, State Sanitorium for Tuberculosis, Norton, Kansas.

DEGREES: M.D., Rush Medical College, University of Chicago, 1919.

SPECIALTY: Tuberculosis.

MEMBER: American Medical Association.





W. E. THORNTON, M.D.

FORT WAYNE, INDIANA

Medical Director and Second Vice-President Lincoln National Life Insurance Company, Fort Wayne, Indiana.

DEGREES: M.D., Medical College of Indiana, 1901.

MEMBER: Vice-Chairman Medical Section of The American Life Association; Executive Council Medical Directors Association; American Medical Association.

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ANNUAL SESSION - - Speakers



MEYER WIENER, M.D.

St. Louis, Missouri

Professor of Clinical Ophthalmology, Washington University School of Medicine; Associate Ophthalmologist Barnes Hospital and Children's Hospital, St. Louis, Missouri; Chief of Eye Service Jewish Hospital, Chief Ophthalmic Surgeon Missouri Pacific Hospital and Frisco Hospital, Ophthalmologist St. Vincent's Sanitarium and Bethesda Hospital, St. Louis, Missouri.

DEGREES: M.D., Missouri Medical College, 1896; Berlin, Heidelberg, Vienna, Paris and London.

SPECIALTY: Ophthalmology.

MEMBER: American College of Surgeons; Academy of Ophthalmology and Oto-Laryngology; Lieutenant Colonel Medical Officers Reserve Corps; Chicago Ophthalmological Society; Kansas City Ophthalmological Society; American Medical Association.

CHRISTIAN ALEXANDER HELLWIG, M.D. WICHITA, KANSAS

Pathologist St. Francis Hospital, Wichita.

DEGREES: Rheinische Friedrich-Wilheims-Universitat Medizinische Fakultat, Bonn,

Prussia, 1916.

SPECIALTY: Pathology.

MEMBER: American Medical Association; American Association of Pathologists and

Bacteriologists; American Society of Clinical Pathologists.

ELLIOTT P. JOSLIN, M.D.

BOSTON, MASSACHUSETTS

Medical Director of the George F. Baker Clinic, Boston; and Clinical Professor of Medicine of the Harvard Medical School.

SPECIALTY: Internal Medicine.

MEMBER: American College of Physicians; Association of American Physicians;

American Society for Clinical Investigation; American Medical Association.

JAMES HERBERT MITCHELL, M.D.

CHICAGO, ILLINOIS

Associate Clinical Professor of Dermatology, Rush Medical College, University of Chicago.

DEGREES: M.D., Rush Medical College, University of Chicago, 1913.

SPECIALTY: Dermatology.

MEMBER: American Medical Association; American Dermatological Association.

GALEN MARTIN TICE, M.D.

KANSAS CITY, KANSAS

Assistant Professor of Radiology, University of Kansas School of Medicine

DEGREES: M.D., University of Kansas School of Medicine, 1929

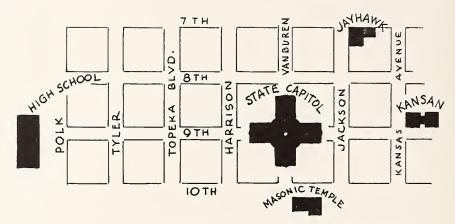
SPECIALTY: Radiology

MEMBER: American Medical Association, American Board of Radiology, Radiological

Society of North America.

PLACE OF MEETING

The Masonic Temple was selected as the place of meeting for the Seventy-eighth Annual Session by reason of its ideal location and its ample space. The building is located at Tenth and Van Buren Streets and faces the south entrance of the State Capitol.



MAP OF TOPEKA STREETS SHOWING LOCATION OF MASONIC TEMPLE AND OTHER MEETING PLACES

All events with the exception of the Round Table Luncheons, House of Delegates Meetings, Annual Banquet, and Golf and Trap Tournaments will be held at the Masonic Temple.

COMMITTEE IN CHARGE OF ARRANGEMENTS:

Guy Finney, M.D., Chairman W. H. Weidling, M.D.

C. K. Shaffer, M.D. W. M. Mills, M.D.

REGISTRATION

Registration headquarters will be established in the entrance lobby of the Masonic Temple. Every member must register before he is entitled to attendance at any of the events at the meeting. Only requirement for registration is membership in a county medical society and presentation of a 1937 membership card. Registration by any other means requires certification by the secretary of the county medical society of residence or by an officer of the Society.

The Registration Desk will be open from 8 a.m. to 6 p.m. each day.

Tickets for the Annual Banquet and the Round Table Luncheons will be on sale daily at the Registration Desk.

Members are urged to utilize the registration desk in all ways possible for convenience and assistance. Page service will be available to facilitate the handling of telephone calls and the delivery of communications and telegrams. Physicians expecting emergency or urgent calls may leave word at this place. Any other service desired will be promptly and efficiently given upon request.

J. L. Lattimore, M.D., General Chairman for 78th Annual Session M. B. Miller, M.D., General Treasurer for 78th Annual Session

COMMITTEE IN CHARGE OF SCIENTIFIC PROGRAM:

PROGRAM: L. R. Pyle, M.D., Chairman SECTIONS: H. W. Powers, M.D., Chairman

L. E. Eckles, M.D.

M. B. Miller, M.D.

M. G. Sloo, M.D.

J. G. Stewart, M.D.

A. D. Gray, M.D.

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HOUSE OF DELEGATES

The first meeting of the House of Delegates will be held at eight p.m., Tuesday May fourth, at the Convention Hall Hotel Jayhawk. The final meeting will convene at eight a.m. on Thursday, May sixth at the same place.

Provision is made in the Constitution and By-Laws that each county medical society shall be entitled to send to the House of Delegates each year one duly qualified delegate for every twenty members, and one duly qualified delegate for each major fraction thereof; provided that each component society which has made its annual report and paid its assessments as provided in the Constitution and By-Laws shall be entitled to at least one duly qualified delegate.

The following section in the By-Laws which becomes effective this year is also of interest to delegates:

Sec. 4. In the event an elected delegate shall find it impossible to attend an annual or special session of the House of Delegates, he shall appoint an alternate to attend and serve in his place: Provided, that such alternate shall qualify himself to the Committee on Credentials. In the event a particular component society is not represented by either a delegate or alternate at a meeting of the House of Delegates, that body by majority vote may elect a member of that component society to serve as a delegate for that meeting.

The agenda for this year's House of Delegates will include many matters of extreme importance and each county medical society is urged to have its delegates or selected alternates present at both of the meetings.

Members other than delegates are also invited to attend.

BANQUET AND DANCE

The Annual Banquet for members and their guests will be held at 6:30 p.m., on Wednesday, May 5, at the Topeka High School (Tenth Street four blocks West of the Masonic Temple).

Featured speaker at the banquet will be Mr. Tom Collins, Sunday and Literary Editor of the Kansas City Journal-Post, and an after dinner speaker of wide reputation. His talk will be entirely humorous and is guaranteed to please. Other entertainment will include Adkins Troubadors, of Kansas City, Missouri, and Mr. Ray Harshbarger, a magician of Topeka.

The past presidents of the Society will be guests of honor at the banquet.

Immediately following the banquet a dance will be held at the Roof Garden of the Hotel Jayhawk. Music will be furnished by Howard Judkins' Orchestra of Topeka. The detailed program is as follows:

6:30 p.m.—Banquet—Topeka High School
H. L. Snyder M.D.,—Toastmaster
Adkins Troubadors—Music
Mr. Ray Harshbarger—Magic
Mr. Tom Collins—Lecture

9:00 p.m. Dance—Hotel Jayhawk Roof

All members are urged to buy tickets at the time of their registration, inasmuch as only a limited supply will be available at the banquet. The price of one dollar per person will include both the banquet and the dance.

COMMITTEE IN CHARGE: H. L. Kirkpatrick, M.D., Topeka, Chairman.
E. H. Decker, M.D.
M. Hall, M.D.
G. L. Kerley, M.D.

SCIENTIFIC EXHIBITS

No meeting of the Society has ever presented a larger or more interesting selection of scientific exhibits than those scheduled for the present session.

The exhibits will be located in the Grand Lobby of the Masonic Temple and will be open from eight a.m. to six p.m., throughout the meeting.

The exhibits scheduled are as follows:

WHAT THE PUBLIC IS THINKING ABOUT HEALTH

American Medical Association An exhibit of posters and literature.

ALLERGIC ASPHYXIA

American Medical Association An exhibit of posters and literature.

FOOD FADS

American Medical Association An exhibit of posters and literature.

RETROPHARYNGEAL ABSCESS

F. C. Boggs, M.D., Topeka, Kansas An exhibit of posters and drawings.

COMMON DERMATOSES

J. A. Borghoff, M.D., Omaha, Nebraska A collection of photographs.

ALLERGY

A. J. Brier, M.D., Topeka, Kansas A poster collection.

STATE BOARD OF HEALTH EXHIBIT

Earle G. Brown, M.D., Topeka, Kansas A poster collection.

THE LEVIN TUBE

Wilfred Cox, M.D., Wichita A demonstration.

VISCERO-RENAL REFLEXES

O. W. Davidson, M.D., Kansas City, Kansas Transparencies and x-ray photographs.

TIDAL DRAINAGE

O. W. Davidson, M.D., Kansas City, Kansas A demonstration of apparatus.

UTERINE BLEEDING AFTER FORTY

C. A. Hellwig, M.D., Wichita, Kansas Transparencies and photographs.

FURUNCULOSIS

A. E. Hiebert, M.D., Topeka, Kansas Apparatus for treatment.

PATHOLOGY—WICHITA HOSPITAL

Maurice Jones, M.D., Wichita Pathological specimens.

MEDICAL PUBLICATIONS

The Journal of The Kansas Medical Society

A collection of all leading modern medical publications and thirty-six years of The Journal of The Kansas Medical Society:

GENERAL PATHOLOGY

J. L. Lattimore, M.D., Topeka, Kansas An exhibit of pathological specimens.

PATHOLOGICAL EYE SPECIMENS

Mager & Gougelmann, Chicago, Illinois A collection of specimens and photographs.

FRACTURES

J. W. Martin, M.D., Omaha, Nebraska A collection of x-ray photographs.

CARDIOVASCULARRENAL DISEASE

Metropolitan Life Insurance Company A poster exhibit.

DIABETES

Metropolitan Life Insurance Company A poster exhibit.

PHYSIOTHERAPY

M. E. Pusitz, M.D., Topeka, Kansas Demonstration of equipment.

ORTHOPEDIC SURGERY

M. E. Pusitz, M.D., A. K. Owen, M.D., G. A. Finney, M.D., J. L. Lattimore, M.D., Topeka, Kansas

An exhibit of posters, transparencies and pathological specimens.

FOOD ALLERGY

Herbert J. Rinkel, M.D., Kansas City, Missouri A collection of posters and photographs.

BONE LESIONS

Charles Rombold, M.D., Wichita X-ray and micro-photograph collection.

ELECTROCARDIOGRAPHY

Maurice Snyder, M.D., Salina, Kansas An exhibit of transparencies.

ENCEPHALOGRAPHY

Frank R. Teachnor, M.D., Kansas City, Missouri A collection of x-ray photographs.

ETIOLOGY AND HISTCLOGY OF PURITUS ANI

Claude C. Tucker, M.D., and C. A. Hellwig, M.D., Wichita, Kansas A collection of transparencies.

ALLERGY

O. R. Withers, M.D., Kansas City, Missouri An exhibit of posters and photographs.

UNIVERSITY OF KANSAS SCHOOL OF MEDICINE EXHIBIT Comprising sixteen subjects.

COMMITTEE IN CHARGE: F. C. Taggart, M.D., Chairman.

M. E. Pusitz, M.D. A. J. Brier, M.D. Leo Smith, M.D.

PAST PRESIDENTS

The living past presidents of the Society, all of whom will be present at the Annual Banquet as the guests of honor, and the years they served are as follows:

O. P. Davis, M.D., Topeka 1910-11

G. M. Gray, M.D., Kansas City 1912-13

O. D. Walker, M.D., Salina 1915-16

Charles S. Huffman, M.D., Columbus 1917-18

W. S. Lindsay, M.D., Topeka 1918-19

M. L. Perry, M.D., Topeka 1922-23

E. D. Ebright, M.D., Wichita 1923-24

Alfred O'Donnell, M.D., Ellsworth 1924-25

F. A. Carmichael, M.D., Fulton, Missouri 1925-26

Earle G. Brown, M.D., Topeka 1927-28

John A. Dillon, M.D., Larned 1928-29

L. F. Barney, M.D., Kansas City, Kansas 1929-30

E. S. Edgerton, M.D., Wichita 1930-31

E. C. Duncan, M.D., Fredonia 1931-32

J. D. Colt, M.D., Manhattan 1932-33

W. F. Bowen, M.D., Topeka 1933-34

J. F. Hassig, M.D., Kansas City, Kansas 1934-35

COMMITTEE IN CHARGE: F. C. Boggs, M.D., Chairman H. B. Talbot, M.D.

ROUND TABLE LUNCHEONS

Round Table Luncheons for discussion of sectional topics will be held each day during the meeting. The luncheons will be attended by the guest speakers and are provided in order that members may ask questions and discuss any subjects in which they are interested. An innovation has been arranged this year in that the luncheons will be substituted for the usual discussion at the General Assemblies.

Since the Round Table Luncheons are reserved for discussion of subjects of a wider scope than the formal program permits, there will be no formal presentation of papers. Pads of paper will be provided upon which questions on topics to be discussed are to be written and handed to the presiding doctor.

Tickets will be on sale daily at the registration desk. Members are urged to attend and to buy their tickets in advance.

TECHNICAL EXHIBITS

This years technical exhibits will also be the largest in the history of the Society. Much new equipment and many new discoveries will be exhibited. Every member is urged to spend all possible time at these interesting displays.

Intermissions have been planned between each scientific presentation for inspection of exhibits.

The technical exhibits will be located in the Grand Lobby of the Masonic Temple and will be open daily from eight a. m. to six p. m.

The exhibitors who will attend are as follows:

Booth No. 1—AMERICAN OPTICAL COMPANY

"American Optical Company will exhibit several new instruments of interest to the profession including the Polaroid Opthalmoscope. The exhibit will be in charge of W. G. Locke, Kansas City, E. B. Pauley, Salina, and C. L. Dailey, Topeka who hope to greet many of their friends at Booth No. 1."

Booth No. 2—PETROLAGAR LABORATORIES INCORPORATED

"Physicians are cordially invited to visit Booth No. 2 where Petrolagar Laboratories, Inc. will be represented by Mr. A. H. Sherburne.

Petrolagar is an emulsion of pure mineral oil (65% by volume) and agar-agar, 'accepted by the Council on Pharmacy and Chemistry of the American Medical Association for the specialized treatment of constipation. Scientific drawings and literature on the subject of constipation will be available in addition to samples of the five types of Petrolagar."

Booth No. 3—THE W. E. ISLE COMPANY

"The W. E. Isle Company offers an unusual service for those of your patients requiring prosthetic or orthopedic appliances.

We manufacture Isle Superior Artificial Limbs, Knit-Rite Stump Socks for artificial limb wearers, orthopedic appliances, improved Bradford frames, Campbell and Aeroplane splints and surgical supports.

We carry Camp surgical and maternity supports, Gossard Corsets, elastic and Lastex hose, trusses, crutches and canes.

Doctor, you are invited to inspect our exhibit in Booth 3 at the state meeting, and also our store and factory located at 1121 Grand Avenue, Kaansas City, Missouri, second floor, VIctor 2350."

Booth No. 4—LEDERLE LARORATORIES INCORPORATED

"The features at this exhibit will be our Solution Liver Extract ((Parenteral and Oral, but particularly the 1 cc Parenteral which contains active material obtained fom 100 grams of Liver) Pneumonia, (Therapeutic Sera and Neufeld Typing Sera) Pollen Antigens, Poison Ivy Extract, and various of our newer items—among which is the new Smallpox Vaccine, Chick (Rivers' method)."

Booth No. 5—LEPEL HIGH FREQUENCY LABORATORIES INCORPORATED

"Will feature among other equipment their Portable Short Wave machine, the Lepel Ultra-Violet lamp energized from the portable machine and the Leplex portable X-Ray unit."

Booth No. 6.—E. R. SQUIBB & SONS

"The complete line of Squibbs Vitamin, Glandular, Arsenical and Biological Products and Specialties, as well as a number of interesting new items will be featured, including Protamine Zinc Insulin, a new chemo-therapeutic agent for treatment of hemolytic streptococcic infections, and a new urinary antiseptic.

Well informed Squibb Representatives will be on hand to welcome you and to furnish any information desired on the products displayed."

Booth No. 7—RIGGS OPTICAL COMPANY

"Our exhibit will consist of Bausch & Lomb ophthalmological equipment, including the Universal Slit Lamp with Binocular-Corneal Microscope, the Binocular Ophthalmoscope, the Ferree-Rand Perimeter and Ferree-Rand Projector. Featured in this display will be the Flourescent Lamp for Cataract Surgery, recently developed and perfected by H. Rommel Hildreth, M.D., of St. Louis, in conjunction with the Bausch & Lomb Optical Company of Rochester.

We will also exhibit orthoptic instruments and a complete line of Bausch & Lomb frames, mountings, and lenses. The exhibit will be of interest not only to the ophthalmologists but to the general man who does refracting."

Booth No. 8—LEA & FEBIGER PUBLISHERS

"In charge of H. L. Williams, Lea & Febiger will exhibit the following new works—Atkinson's Ocular Fundus, Brahdy & Kahn's Trauma and Disease, Levinson & MacFate's Clinical Laboratory Diagnosis, Werner's Endocrinology, Wesson & Ruggles' Urological Roentgenology, Mattice's Chemical Procedures, Davis' Neurological Surgery, Saxl's Pediatric Dietetics and Rowe's Clinical Allergy. New editions will be shown of the following standard works—DuBois' Basal Metabolism, Gray's Anatomy, Rhinehart's Roentgenographic Technique, Kuntz's Neuro-Anatomy, Cushny's Pharmacology, Starling's Physiology, Holmes & Ruggles' Roentgen Interpretation, Cabot's Urology, Bridges' Dietetics, Gifford's Ocular Therapeutics and Wiggins' Physiology."

Booth No. 9—GEORGE A. BREON & COMPANY

"Our exhibit will be in charge of our Mr. E. R. Hess. Mr. Hess will be prepared to demonstrate and will present samples of Hyolin Caplets and Karamin. The latter is a bulk laxative preparation consisting of karaya crystals and vitamin B."

Booth No. 10—GENERAL ELECTRIC X-RAY CORPORATION

"Every physician will be interested in the new, light-weight, low-priced, G-E Model "B" Electrocardiograph which the General Electric X-Ray Corporation will display in exhibit space No. 10. This instrument employs an entirely new circuit for thermionic amplification of the minute electrical potentials set up by the action of the heart. The procedure of recording has been made extremely simple, and consistent accuracy of results has been assured. The meeting of Kansas Medical Society is one of the few medical conventions of this year at which this splendid apparatus will be exhibited. Be sure to inspect it.

In addition to the new Electrocardiograph, the Model "F" portable, shockproof x-ray unit for use in office or while on calls will be shown as will, also, the world-famous G-E Inductotherm—favored apparatus for the generation of deep tissue heating."

Booth No.11—GREB X-RAY COMPANY

"The Greb X-Ray Company will exhibit something really new and interesting in x-ray apparatus. A visit to our Booth will be well worth the time. We cordially invite Doctors attending to use our services in every way. We will be glad to take care of mail, telegrams and telephone calls if the Doctors desiring this service will register with us on arrival."

Booth No. 12—THE MIDWEST SURGICAL SUPPLY COMPANY

"The Allison Air Conditioner which has been especially designed for us in Physicians' offices, also the Liebel-Flarsheim Short Wave Unit which has been sold exclusively, to medical men, in the State of Kansas. New and correct patterns of surgical instruments, will be exhibited also. Cy Jennings, Fay Martin and George Smith will be in attendance."

Booth No. 13—MERCK & COMPANY INCORPORATED

"Physicians interested in the new peripheral vasodilator, Mecholyl, may obtain at Booth 13 full information regarding its use in the treatment of the peripheral vascular diseases, varicose ulcers, neurogenic bladders, and other diseases in which parasympathetic stimulation is required."

Booth No. 14—QUINTON-DUFFENS OPTICAL COMPANY

"Our display will consist of all different types of lenses and frames, particularly bifocals and trifocals. In addition we will show the different steps in the manufacture of the newest type bifocals."

Booth No. 15—A. S. ALOE COMPANY

"A. S. Aloe Company will display a general line of surgical instruments and equipment for the physician and hospital. The new Aloe Short Wave Diatherm, the Elliott Treatment Regulator, the New de Bakey Blood Transfusion Instrument and other specialties will be featured. Mr. Max M. Coe, Aloe representative, will supply those interested with brochures on Aloe Steeline, the most modern creation in physician's fine treatment room furniture."

Booth No. 16—w. A. ROSENTHAL X-RAY COMPANY

"It is our intention to display one of the new Westinghouse Shock-proof Portable x-ray units—illuminators and accessory equipment, also Physical Therapy apparatus. All physicians and their associates are extended a cordial invitation to visit our exhibit, which will be under the direction of John Melaske and Eli Denlinger, our Kansas representatives."

Booth No. 17—HORLICK'S MALTED MILK CORPORATION

"You are cordially invited to visit the Horlick's Malted Milk Corporation Exhibit in Booth No. 17. Your attention is drawn to the special advantages of Horlick's Malted Milk as a nutritious, easily digested food-drink, often acceptable when no other food can be tolerated. Its special value will be pointed out

- 1. For infant feeding
- 2. For growing children
- 3. For nursing mothers
- 4. For the undernourished
- 5. For the sick, especially in fever and ulcer diets
- 6. For the convalescent
- 7. In sleeplessness"

Booth No. 18—THE BARD-PARKER COMPANY

"The Bard-Parker Company will demonstrate the outstanding features of their Rib-Back blade incorporating new standards of cutting efficiency and economy. Also will be shown a complete line of stainless steel scissors with renewable edges which eliminate resharpening, a selection of quality forceps with the Lahey lock and an interesting demonstration of Rustproof sterilization for surgical instruments with B-P Formaldehyde Germicide."

Booth No. 19—THE MEDICAL PROTECTIVE COMPANY

"The Medical Protective Company is represented at Booth 19 where you are invited to call. Medical Protective service is an institution of the Medical profession whose legal liability problems we have concentrated upon for thirty-eight years. Bring your professional liability questions and problems to Booth 19. Our representative is at your service to present our Protective plan, to explain the peculiar relation of the doctor to the law which governs your practice or to discuss any particular phase of Professional Liability in which you are especially interested."

Booth No. 20—MEAD JOHNSON & COMPANY

"Representatives of the Company will be prepared to discuss a number of recently introduced products in the vitamin field and the general field of nutrition, as well as a number of new services. It is always the plan and desire of the Company to have something new and interesting to discuss with its physician friends at this annual meeting."

Booth No. 21—PHILIP MORRIS & COMPANY LIMITED

"Philip Morris & Co. Ltd. will demonstrate the method by which it was found that Philip Morris cigarettes, in which diethylene glycol is used as the hygroscopic agent, are less irritating than ordinary cigarettes in which glycerine is employed."

Booth No. 22—P. W. HANICKE MANUFACTURING COMPANY

"Our exhibit consists of both the ordinary and well known types of braces for

correction of deformities, such as are in use for many years and are accepted as standard appliances, and also those of our own design lately developed and constantly improved by diligent research work of recent years. Our representatives Mr. Erich and Werner Hanicke will be at your service."

Booth No. 23—HOLLAND-RANTOS COMPANY INCORPORATED

"This firm has pioneered the ethical distribution thru the medical profession of scientific contraceptive specialties—H-R Koromex Diaphragms and Koromex Jelly, etc. Be sure to see the film on the technicque of fitting the diaphragm-pessary and secure your copy of the illustrated IMPROVED GUIDE (without obligation).

The Powdex Vaginal Insufflator (with cartridges containing a cinquarsen powder formula supplemented where necessary by a solution for bladder instillation) has demonstrated clinically its value as a simple, quick and effective treatment in cases of trichomonas vaginitis vaginalis. The Powdex method is now accepted and used in leading hospitals.

Rantosilk lightweight waterproof sheeting is durable, tested fabric available in yardage and made up into hospital bedding and garments such as surgeons' aprons, patients' throws, etc. There is a pillowslip especially designed for allergic patients and the Rantos Fever Bag for use in conjunction with hyperpyrexia equipment.

The Holland-Rantos representative will be pleased to discuss Koromex Products with interested physicians."

Booth No. 24—THE TOPEKA AIR-CONDITIONING COMPANY

"This exhibit will feature Chrysler Air-Temp Air-Conditioning and humidification units suitable for office and hospital, as well as residential use. The company deals exclusively in air-conditioning and their engineer will be glad to answer any questions along that line."

Booth No. 25—W. C. AYERS

"Electro-Therapy equipment."

Booth No. 26—THE KELLY-KOETT MANUFACTURING COMPANY INCORPORATED

"We will exhibit our K-90 Combination Shockproof Radiographic and Fluoroscopic Unit with Tilting Table, also our K-58 Shockproof Portable Unit along with various accessory equipment."

Booth No. 27—THE C. V. MOSBY COMPANY

"The newer books to be exhibited for the first time by the C. V. Mosby Company are as follows—Horsley-Bigger "Operative Surgery"; Titus "Management of Obstetric Rifficulties"; Hirschman "Synopsis of Ano-Rectal Disease"; Mansfield "Materia Medica"; Shands "Orthopedic Surgery"; Koll "Medical Urology"; Meakins "Practice of Medicine", Sadler "Theory and Practice of Psychiatry"; and the Journal of Surgery. Physicians attending the Kansas Medical Convention are cordially invited to look these over and other dependable Mosby medical publications."

Booth No. 28—H. G. FISCHER & COMPANY

"H. G. Fischer & Company will display and demonstrate their latest models x-ray and Short Wave Apparatus. Because of unique features in Fischer design, visiting physicians should not fail to visit the Fischer booth."

Booth No. 29—MRS. R. R. BAER

"A practical display of Baers Adjustable Bed Support for raising beds (the foot or the entire bed.)"

Booth No. 30—HALL STATIONERY COMPANY

"Complete line Leica Cameras and accessories. The Bell and Howell sixteen m. m. motion picture cameras and projectors and eight m. m. cameras and projectors. Eastman photographic materials in a rather complete line."

COMMITTEE IN CHARGE: J. T. Hunter, M.D., Chairman

O. M. Raines, M.D. C. E. Joss, M.D.

H. W. Gootee, M.D.

ALUMNI BANQUETS

An event of unusual interest will be the Alumni Banquets to be held at six-thirty p.m., on Tuesday, May fourth at the following places:

HOTEL JAYHAWK

University of Kansas

Sponsors-H. L. Kirkpatrick, M.D., Topeka

C. K. Schaeffer, M.D., Topeka

Rush Medical College

Sponsors-L. R. Pyle, M.D., Topeka

H. B. Hogeboom, M.D., Topeka

St. Louis University

Sponsors-E. H. Decker, M.D., Topeka

A. J. Brier, M.D., Topeka

Creighton University

Sponsors—F. L. Loveland, M.D., Topeka

Leo Smith, M.D., Topeka

Louisville University

Sponsors-M. Hall, M.D., Topeka

J. F. Casto, Topeka

Colorado University

Sponsors-F. C. Taggart, M.D., Topeka

F. E. McCord, M.D., Topeka

HOTEL KANSAN

Iowa University

Sponsors-H. L. Powers, M.D., Topeka

F. E. Vest, M.D., Topeka

University Medical College of Kansas City

Sponsors—A. E. Billings, M.D., Topeka

W. J. Walker, M.D., Topeka

Ensworth Medical College

Sponsors—W. C. Heaston, M.D., McPherson

S. M. Hibbard, M.D., Sabetha

Oklahoma University

Sponsors-A. H. Marshall, M.D., Topeka

A. D. Danielson, M.D., Herington

Washington University

Sponsors-H. J. Davis, M.D., Topeka

O. R. Clark, M.D., Topeka

THE CHOCOLATE SHOP

Kansas Medical College

Sponsors-A. D. Gray, M.D., Topeka

J. G. Stewart, M.D., Topeka

H. A. Hope, M.D., Hunter

TOPEKA COUNTRY CLUB

Northwestern University

Sponsors—H. T. Morris, M.D., Topeka

J. W. Tidd, M.D., Topeka

SHAWNEE COUNTRY CLUB

Kansas City Medical College

Sponsors-E. D. Ebright, M.D., Wichita

Ben Brunner, M.D., Wamego

This also represents a new event at Kansas meetings. An opportunity is afforded to meet classmates whom you have not seen for many years, to relate anecdotes, and to renew

friendships. Entertainment will vary at the different banquets and will be left largely to the desires of the individual groups.

An effort has been made to provide a meeting place for every school which has a sizeable number of alumni in the state. However if you find no place has been scheduled for your school you are cordially invited to select a banquet to your liking and to attend.

Reservations may be made through the sponsors above listed or at the place of the banquet.

GOLF AND TRAP SHOOTING TOURNAMENTS AND STAG BANQUET

The annual tournament of The Kansas Medical Golfing and Trapshooting Associations are to be held on Monday, May third. The golf tournament will be at the Shawnee Country Club, starting at 8:30 a.m. in the morning; the trapshooting tournament to begin at the same hour at the Izaac Walton League Club two miles east of Topeka. The golf tournament will consist of two flights, a Championship Flight and a Handicap Flight. Handicaps will be determined by last year's scores, except in the cases of those who have not played before, whose handicaps will be taken from the record of the first nine of the eighteen holes played.



MEAD JOHNSON & COMPANY, PERMANENT TROPHIES

The trap tournament will commence with a qualifying round of twenty-five birds, on which the shooters handicap will be based. This will be followed by the regular rounds to determine the championship.

The incomplete list of prizes is as follows:

MEAD JOHNSON & COMPANY, EVANSVILLE, INDIANA

Handicap Trophies for both golf and trap (see illustration), to be awarded permanently for three victories.

QUINTON-DUFFENS OPTICAL COMPANY, TOPEKA

Golf Championship Trophy—to be awarded permanently this year.

PAUL M. PINET, TOPEKA

Trapshooting Championship Trophy—to be awarded permanently this year.

AMERICAN OPTICAL COMPANY, SOUTHBRIDGE, MASSACHUSETTS Pair F317 Calobar Sunglasses

THE W. E. ISLE COMPANY, KANSAS CITY, MISSOURI Desk lamp.

A. S. ALOE COMPANY, ST. LOUIS, MISSOURI Physician's bag.

L. C. RAHN, TOPEKA

Certificate for five dollar shirt.

PHILIP MORRIS & COMPANY LIMITED, NEW YORK, NEW YORK Three cartons Philip Morris Cigarettes

THE C. V. MOSBY COMPANY, ST. LOUIS "Synopsis of Ano-Rectal Diseases', by Hirschman

PETROLAGAR LABORATORIES INCORPORATED, CHICAGO, ILLINOIS Two dozen jars Sy-Lac.

HOLLAND-RANTOS, INCORPORATED, NEW YORK, NEW YORK Rubber aprons.

E. R. SQUIBB & SONS, NEW YORK, NEW YORK Squibb "Book of Health" box.

GENERAL ELECTRIC X-RAY CORPORATION, CHICAGO, ILLINOIS A gift.

PARKE, DAVIS & COMPANY, DETROIT, MICHIGAN Tuberculin Syringe.

LEDERLE LABORATORIES INCORPORATED A gift.

Commencing at six-thirty in the evening of the same day the Annual Stag Banquet for Golfers and Trapshooters is to be held at the Shawnee Country Club.

If you have attended one of these events in the past you will need no special invitation. If you have not, you are assured that you will have a good time. Members who do not desire to play golf or trap shoot are invited to form the gallery for either of the sports and to become full fledged participants in the banquet.

COMMITTEE IN CHARGE: F. L. Loveland, M.D., Chairman

H. T. Morris, M.D. W. W. Reed, M.D. R. J. Miller, M.D.

PAGE SERVICE

Six pages will be on duty constantly during the session, to assist members in all ways possible and to facilitate the handling of telephone calls and urgent communications. Members expecting emergency calls are requested to notify the registration desk.

SCHEDULE OF EVENTS FOR VISITING WOMEN ANNUAL SESSION TOPEKA, MAY 4, 5, 6

TUESDAY MAY 4

Registration—Masonic Temple

10:00 A. M. Meeting Board of Directors Kansas Medical Auxiliary

Hotel Jayhawk

3:00 P. M. Marionettes

Mulvane Art Museum, Washburn College

4:00 P. M. Tea

Home of Mrs. J. L. Lattimore 3109 Canterbury Lane

WEDNESDAY MAY 5

Registration—Masonic Temple

10:00 A. M. Meeting of Delegates Kansas Medical Auxiliary Hotel Jayhawk

1:00 P. M. Luncheon

Hotel Jayhawk

Speakers:

H. L. Snyder, M.D., President The Kansas Medical Society Mrs. David S. Long, Vice-president National Auxiliary

6:30 P.M. Annual Banquet

The Kansas Medical Society

Topeka High School

9:00 P. M. Dance

Hotel Jayhawk Roof

THURSDAY MAY 6

Registration—Masonic Temple

11:00 A. M. Art Department Program
Topeka Women's Club
Ninth and Topeka Boulevard

12:30 P.M. Luncheon

Topeka Women's Club

1:30 P. M. Musicale

Music Department Topeka Women's Club

3:30 P. M. Automobile Tour of Points of Interest Reinisch Rose Garden Topeka High School

COMMITTEE IN CHARGE: Mrs. J. T. Hunter, Chairman

Mrs. W. M. Mills Mrs. H. B. Hogeboom Mrs. C. B. Van Horn E. A. Ernest, M.D. APRIL, 1937 161

MARIONETTES

The Washburn Marionette Theater group works in the little theater in the Mulvane Art Museum at Washburn College. The course is listed in the night school, and is open to post-graduate and juniors and seniors in the Dramatic Department of Washburn. The group is composed largely of adults, and has in its membership doctors, dentists, lawyers, and persons of various other occupations.

The group plan a marionette production in the fall and work on it evenings until April of the following year. All of the marionettes, properties, and scenery are constructed by the members of the class. An extremely high standard has been established, and the theater is recognized all over the country.

The founder of the group and its director during all its existance is Dr. Arthur D. Gray, a Topeka physician.

REINISCH ROSE GARDEN

This vast rose garden, which received the first prize award as the most beautiful garden in America given by the magazine Better Homes and Gardens, contains 19,000 hybrid tea roses together with thousands of climbing, standard and bush roses. The gardens are never closed and at night are lighted with flood lights. Adjoining the rose garden is a rock garden covering four acres. Like the rose garden, it is unusual in its beauty, design, and execution.

MRS. MARTIN JOHNSON

An entertainment event of unusual interest during the annual session will be a lecture by Mrs. Martin Johnson at the Topeka High School Auditorium at 8:15 p. m. on Tuesday, May 4. Mrs. Johnson's lecture is sponsored by the Topeka Junior Chamber of Commerce and will include moving pictures made by herself and her late husband during their recent trip to Borneo. A sizeable number of seats has been reserved for visiting physicians and their wives. Tickets will be on sale at the registration desk.

THE FINEST HIGH SCHOOL BUILDING IN AMERICA

Impressive among Topeka educational facilities is the new Topeka High School building. Built in 1931 at a cost of nearly two million dollars, it is acclaimed by educators and architects to be the most beautiful and efficient high school building in America. It has a library of 10,000 volumes, a gymnasium seating 3,500 and an auditorium seating 2,500. The beauty of its Tudor architecture and the modern efficiency of its design have attracted educators and visitors from all parts of the nation.

WASHBURN COLLEGE

Washburn College, founded in 1865 is one of the oldest colleges in the state. It is non-sectional, co-educational, and offers a wide curriculum in liberal arts, law, music, fine arts, science, and physical education. Washburn, a \$2,000,000 institution, is a member of the Missouri Valley Conference and the North Central Association of Colleges and Secondary Schools.

Washburn's beautiful 160-acre campus includes, in addition to the college buildings, the Moore Athletic Bowl and the Washburn golf course. It is in the southwest section of Topeka, and visitors are welcome at all times.

PRESIDENT'S PAGE

To the members of The Kansas Medical Society:

It has been my privilege to serve you for two years in an official capacity as President-elect and President. There has been no experience in my life that has been so full of pleasure and real appreciation of my fellow practioners and my fellowmen as this period. The unselfish support, the fine cooperation, the individual willingness to serve, and the ready acceptance of responsibility by every member of this Society has been an inspiration to me.

To be the President of our Society is the greatest honor that the profession could confer upon one of its members. I appreciate that honor with the humility that the office deserves. The tenure of my office has been made pleasant because of the very fine work that Dr. W. F. Bowen did as President in 1934, at which time the office of executive secretary was established. He was succeeded by Dr. J. F. Hassig who had served seventeen years as secretary of this Society and who brought to the presidency the experience of having actually managed the organization for those years. He perfected the working plan of the office of executive secretary established by Dr. W. F. Bowen, appointed working committees, and handed to me in January, 1936, a going concern, alive and alert to the problems and the opportunities of medicine.

Each committee chairman has accepted his responsibility, has performed the work of his committee, and has cooperated with your President to the fullest extent. Certain committees because of the exigencies of the times have had more to do than others, but each member of each committee and each member of each society from the whole state of Kansas has accepted his responsibility with that fine spirit which really gets things done.

The earnest cooperation of Dr. Earle G. Brown of the State Board of Health has made the problems that have confronted us easier to understand and their solution better. There have been many activities and at all times has the viewpoint of the medical profession been taken into consideration. In the setting up of the Social Security Plan, although not ideal, certainly many iniquitous things were eliminated that would have crept in without fine cooperation.

The Editorial Board of The Journal, headed by Dr. Merrill Mills, has improved The Journal, increased its revenues, and kept in step with the time. They have been loyal and helpful with their suggestions and advice.

Our executive secretary, Clarence G. Munns, has been ever alert, has anticipated problems before they arose, and has kept your President thoroughly advised at all times. He has the finest conception of ethical medicine I have ever known a layman to possess, and has helped to think out problems in the manner that seemed best to us and our advisors. I could not say too much in appreciation of his wonderful services, his fine help to me, and his unflagging interest in and loyalty to Kansas Medicine.

The officers of this Society, the Council of this Society, each committee chairman, and the membership have combined to make this a memorable year for work.

I wish to commend to you my successor, the President-elect, Dr. J. F. Gsell, who needs no introduction to Kansas Medicine. He has been a tireless worker, a fearless thinker, who has had a broad conception of the problems that confronted us from the taxroll to the fine ethical answers in medicine. He is my friend, and the best thing that I could wish for him would be that he would have the same fine cooperation from the membership that has been given me.

I wish to thank you for your many courtesies and this great honor you have given me.

Yours sincerely, H. L. Snyder, M. D.

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EDITORIAL

THE RETIRING PRESIDENT

No finer tribute could be paid to Dr. H. L. Snyder's term as president of The Society than to point to the many accomplishments during his year.

Since his term fell within an important legislative year, he accepted therein a responsibility which was of vital interest to the medical profession. There was to be written in that session of the legislature a Social Security Act which would involve many medical problems, and many other matters of extreme importance were expected to be considered. The results have, of course, been told, but there are possibly only a few who realize the great amount of time Dr. Snyder spent in that interest; the many trips he made to Topeka to offer his assistance, and the other splendid legislative aid he gave to the Committee on Public Policy and the central office.

Dr. Snyder also assisted in two other very important contributions during the year—the liason committee plan and the official representative plan. The former which will be further developed in the future provides an opportunity for medicine to cooperate more fully with the many agencies interested in public health; and the latter affords an excellent answer to the problem of non-organized counties.

Another important event during his term was the institution of planned committee work. Early in the year Dr. Snyder called together the chairmen of his appointed committees and discussed with them the programs each would attempt to accomplish. The results have been most gratifying. He also increased the membership of the committees on Medical Economics, Public Policy and Control of Cancer, in order that the entire state might be represented and that the tasks of these committees might thereby be better accomplished. Two new com-

mittees were appointed—one on Tuberculosis, to coordinate the Kansas program on that subject and another on Venereal Disease, which was one of the first of its kind in the country and whose program has received national recognition.



H. L. SNYDER, M. D.

The excellent spirit which has existed between The Society and the Kansas State Board of Health was furthered in many ways. Dr. Snyder cooperated closely with Dr. Earle G. Brown in the preparation of the Kansas plans for maternal and child welfare and public health under the Social Security Act and the results thereof have been eminently satisfactory to the public and the profession.

There also was a large amount of activity in the fields of lay and professional education. The two cancer programs presented during the year were enthusiastically received by both the profession and the laity and it is probable that this has opened a new field of Society public health endeavor which will be widely utilized in the future. The two post-graduate seminars on obstetrics and pediatrics; the National Association of Industrial Accident Boards and Commissions session on medical compensation problems; and the present speakers bureau program of the Committee on Scientific Work

are further examples of progress in this direction.

Much attention was given to the cult and quack problem. Investigators were sent out to obtain evidence against many fraudulent and illegal practioners and many prosecutions based upon this information are now pending. Ground work was also laid for the settlement of several legal issues which will tend to clarify rights of practice in Kansas and provide better protection for the public.

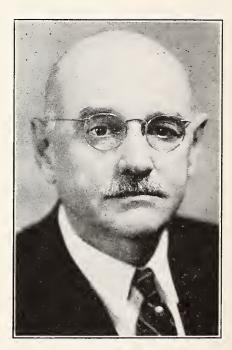
The Kansas medical profession was proud of its President at the Kansas City Meeting of the American Medical Association. His address of welcome was well given and well received. He provided leadership toward making Kansas efficient in its obligations as a co-host and Kansas took pride in the fact that its registration of one thousand and one members was the highest per capita of any state.

Many other accomplishments may be cited: the preparation and adoption of a new Society Constitution and By-Laws; the institution of efforts to compile a medical history for Kansas; cooperation with the W. P. A. nursery school project; approval of the Red Cross First Aid project; final disposition of the Brinkley case; redrafting of the Kansas Mother's Manual; affiliation with the Kansas Association for Social Legislation; continuation of the excellent plan for treatment of W. P. A. traumatic injuries; elimination of several prepayment medical concerns in the state; publication of The Society Basic Science brochure which attracted national attention; publication by the Kansas Research Council of the first official appraisal of basic science laws; assistance to the Women's Army for the control of Cancer: the appointment of doctors of medicine on the State Board of Administration and the State Board of Regents; and many other activities which are now of minor importance because they were successful.

A recital of the record leaves no doubt that Kansas medicine made no mistake when it entrusted its leadership into the capable hands of Dr. Snyder. Those who worked closely with him know that he gave to the Society the greater portion of his time and that he frequently gave more energy than was wise for his health. His reward is the sincere appreciation of every member of the Society for a job well done.

THE NEW PRESIDENT

Anyone familiar with the Society knows that it has made real progress in meeting the crises of medical organization which have arisen during the past few years. Dr. J. F. Gsell, as successor to a long line of presidents who have made that result possible, is amply qualified to carry forward through greater crises and to greater achievements.



J. F. GSELL, M. D.

Dr. Gsell is a physician of unusual professional and executive ability. He has served Sedgwick County Medical Society as its first president and in most of its other official capacities, and he has long been one of the most respected and helpful members of The Society. His wide experience in Society work and particularly as a Councilor and a member of the Medical Economics Committee, equip him well

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to add to the excellent accomplishments of his predecessors.

Dr. Gsell was born in 1873 at Morrison, Illinois. He attended grade and high schools at Blue Hill, Nebraska, and received his medical education at the Rush Medical College in Chicago. He commenced practice at Randolph, Kansas, in 1895 where he continued until 1900. Thereafter he engaged in specialized eye, ear, nose and throat training at the Golden Square Hospital in London, England, and later returned to Wichita where he has specialized in that work. His family includes a wife, two daughters, and one son, Dr. George Gsell, who is associated with him in practice.

In addition to state medical organizations, he is a Fellow of the American Medical Association, a Fellow of the American College of Surgeons, and a Fellow of the American Academy of Ophthalmology and Otolaryngology. He is also a member of the staffs of Sedgwick County, St. Francis, and Wesley Hospitals and holds membership in a number of civic organizations.

Kansas medicine welcomes Dr. Gsell as its President and pledges him its fullest assistance and cooperation.

78TH ANNUAL SESSION

We cannot urge too strongly your attendance at the Seventy-eighth Annual Session.

The scientific program will present some of the best informed physicians in the country and particular effort has been given toward making the subjects of equal interest to general practioners and specialists. The scientific and technical exhibits are the largest in the history of The Society. The round table luncheons are to be presented on an entirely new basis and will provide a medium for discussion of practical problems. The hotel facilities are adequate, the Masonic Temple as the place of meeting is well equipped and ideally situated and there are many new events which you will find of interest.

The Shawnee County Medical Society is proud of this opportunity to serve as your host and it sincerely hopes that you may find it possible to be present.

OFFICIAL PROCEEDINGS

FOREWORD TO DELEGATES

Since the agenda of the House of Delegates has increased appreciably during recent years, an attempt has been made this year to save time necessary for reading of reports by publishing in advance as many of these as possible.

All of the following reports will be discussed and presented for adoption but since they will not be read all delegates are requested to become familiar with them in advance of the meeting.

The following is the report of the Constitutional Secretary:

To: THE HOUSE OF DELEGATES

The year has been one of more than average activity and accomplishment. Since the members of our Society are also citizens in the state where probably more history per capita is made than in any other, this being especially true of the pioneering future determining types of history, and since this was a year of elections both state and federal, they have been active in many phases of general medicine. This activity has had its proper and resultant effect in legislation and in the general development and thinking of the people.

The present movement in the world wherein the hand worker seeks to assume leadership over the brain worker, and of which the great experiment in Russia is a part, has touched and influenced developments in Kansas. While the members of our profession have not been so active nor so extreme as some others, they have, never the less, been alive to the situation and have, rather more than any other group, done their part to keep the world up to date and to make beautiful dreams come true. No small part of their service has been the detecting and consequent deletion of many unworkable and possibly some even harmful proposals of those who were overenthusiastic for reform. As a group better and more practically educated than either the ministry or the teachers and as being trained by experience and observation into a better understanding of humankind and its needs, a very great responsibility rests upon our members as individual citizens. In the main, during this year, they have met this responsibility intelligently and courageously.

As an organization our Society has done several things that its members could not well have done as individuals. Some of this has been accomplished by the appointment of new committees from The Kansas Medical Society. One of these was on tuberculosis and sought to coordinate, consolidate, and direct with greater efficiency the activities already going in this field. Some success has attended the effort of the committee to get the State Board of Health to accept responsibility for matters growing out of the epidemiology of this disease; the State Sanatorium for Tuberculoris to present it clinically; and The Kansas State Tuberculosis and Health Association to lead in the movement to educate the public about it. The other was constituted in an attempt to cooperate with Surgeon General Parran in his effort to make the public venereal disease conscious. This committee began to function with considerable enthusiasm but has slowed up a little probably because the venereal disease problem is not so acute in Kansas as it is in some other regions.

The older Committees have been rather more than usually active. This is especially true of those on Cancer, Public Policy and Legislation, and on Medical Economics. See Committee Reports elsewhere.

While Dr. Duncan will tell you what he thinks you should know about the activities of his committee (Public Policy and Legislation) I cannot refrain from saying a word of admiration and approval for what was accomplished in the legislature. A number of menacing proposals were neutralized in one way or another and two definitely medical welfare bills were passed. The Basic Science bill became a law with a small amendment releasing those who had special examining boards at the time from the compulsion of taking the exams. The way seems to be open for the Board of Medical Examination and Registration to require such exams and many of us believe that it would be a wise and salutary thing to do. The Injunction Law applies no heat to any one except those who are practicing illegally. To and for them it does only one thing—namely, it takes up and shortens some of "the law's delays" which most of us believe to be in the public interest.

This seems a good time to write into the records an appreciation of the friendly cooperation, the gracious tolerance, and the high efficiency of President Snyder and Executive Secretary Munns. Relations with other officers, committees, etc. have been without material friction.

Respectfully submitted, H. L. Chambers, Constitutional Secretary.

The following is the report of the Councilor for the First District:

To: THE HOUSE OF DELEGATES

During the past year, we succeeded in having Medical Societies organized and functioning in all counties of the First District except Jefferson. In Jefferson County, Dr. G. W. Marks, of Valley Falls, was selected as Official Representative of the Society, and has been functioning very nicely. There is also a probability that this county may apply for a charter within the near future.

I consider the organization of the County Components of the Kansas Medical Society, in the First District, in very excellent condition.

Respectfully submitted, R. T. Nichols, Councilor, First District.

The following is the report of the Councilor for the Second District:

To: THE HOUSE OF DELEGATES

This district is now composed of eight counties, Coffey County having been placed in another district upon adoption of the new Constitution and By-Laws of the State Society.

Immediately upon receipt of information that the councilors' reports would be published in The Journal prior to the annual meeting this questionnaire was submitted to each of the county secretaries with a request for a prompt reply:

1-Number members in your society.

- 2—Total number licensed M.Ds. in your county.
- 3—Names of all eligible doctors in your county who are not members and the reason why each is not.
- 4—Number of meetings of your society this year.
- 5—Average attendance at your meetings.
- 6—Any special work of your society referring especially to legislative work, public meetings and other outstanding features.

The responses received at the time of making this report April 14, 1937, follows:

	1	2	3	4	5		
Anderson County							
J. A. Milligan, Secretary	12	14	2	2	80%		
Leavenworth County							
W. L. Pratt, Secretary	23	29	7	6	10		
Johnson County							
Frank E. Tolle, Secretary	23	?	?	4	13		
Franklin County							
Geo. W. Davis, Secretary	19	29	10	3	15		
Wyandotte County							
John H. Luke, Secretary	114	155	40	18	30		
Douglas County							

J. M. Mott, Secretary. No report received at this date. Linn County

H. L. Clark, Secretary, No report received at this date. Miami County

P. T. Gately, Secretary, No report received at this date.
The replies to question three are of special interest.
Anderson County gave the names of two who were not members. The reasons given are age and finance.

Franklin County "ten not members, no reasons given."
Johnson County says, "I have no means of obtaining information of the number of doctors in our county".
An explanation of this is that many have their residences as country homes in Johnson County but maintain their offices and practices in Kansas City, Missouri.

Leavenworth County gave the names of seven. One has retained his membership in Kansas City, Missouri. One claims lack of funds. One failed to pay his dues. On the other four no information was obtained.

Wyandotte County reports one retired, six failed to pay dues, the remaining thirty-three no information.

An analysis of the replies to this question in four counties, Johnson County not included for the obvious

"I never want to go to another party!"



But, dear, tell Mother—what is the matter?"

"They wouldn't let me play with them. They let me be by myself all the time. They—they laughed at me."

What should Mother do? Denounce the other children as ill-raised little barbarians? Prevent further contact with the youngsters who should be the child's playmates, and the neighborhood that should be her happy little world?

Those would be natural and understandable reactions for any mother. But unfortunately, they would tend only to make matters worse.

When a child is "different" or "difficult," the most sensible thing to do is to get the help of your doctor. And the reason is that the underlying cause, while occasionally psychological, is usually physical.

For instance, a child can be slow and awkward at childhood games, because anemia is robbing her of energy. A child can appear backward because a glandular disorder is causing sluggishness, because faulty hearing prevents her from catching questions, or because faulty eyesight prevents her from reading correctly. A child can be sulky or ill-tempered, not because it is her nature to be so, but because some physical derangement is making her act that way.

The tragedies these disorders heap upon little heads are very real tragedies. But even more serious is their possible influence on the child's future. The "laughed-at" child so often becomes the crushed and morose adolescent. And the morose adolescent frequently becomes an embittered man or woman in an unfriendly world.

If your child's present and future happiness is being threatened, see your doctor. You will find him a helpful and understanding friend.

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The World's Largest Makers of Pharmaceutical and Biological Products reasons as stated, shows a membership of 168, with a possible eligibility of fifty-four more, or about twenty-five percent not being members. What is the reason? The councilor and other officers of the state society have offered any help they can give if the local societies will furnish the information as to why they are not members, but the above findings indicate more must be done along this line in many of the local societies.

The answers to question number six are very illuminating and are quoted as follows:

Wyandotte County—"Special work done; crippled children's clinic with orthopedic surgery supervision. Public meetings with lectures on cancer."

Leavenworth County—"The Leavenworth County Medical Society has done much in regard to legislative matters and has promptly responded to each request of the state society."

Johnson County—"Our society at the present time is attempting to work out some satisfactory means for the care of the indigent patients. The possibilities of a county hospital or some agreement with the county commissioners is now being studied."

Franklin County—"Too much for the benefit of our scientific programs".

Anderson County—"All members favorable to medical legislation and wrote favorable letters to the members of the legislature".

An analysis of this question reveals that the societies are active and doing much good work. The reply of Leavenworth County is significant and expresses much of what has occurred in other counties. However, in some counties less lethargy should be shown.

An observation made by the councilor is that occasionally a county society without complete information will at times decide that the committees appointed by the parent organization who have made critical studies of certain subjects are wrong and with their immature knowledge not only fail to cooperate but at times block work that the parent organization is trying to accomplish. Your councilor on several occasions has admonished the societies along this line.

The answers of Johnson County and Franklin County reveals some of the results of the stimulation because of social and economic problems. They also point to the retarding effects of state medicine on scientific progress.

Your councilor regrets his inability to make a complete report on the other three county societies. The failure of the secretaries of these societies to make their reports promptly cause this report to be incomplete and is a good demonstration of how the inactivity of a very few local officers may mitigate the efforts of the entire society. Superficially these criticisms appear severe but the facts are that the councilor has observed that each and every society in his district has done better and better work and cooperated more and more every succeeding year during his administration and only uses these criticisms that our work may continue not only for ourselves but for the benefit of suffering humanity.

In concluding your councilor desires to express his appreciation and gratitude for the splendid cooperation given him and the state society by the officers and members of the county societies in his district.

Respectfully submitted,

L. F. Barney, Councilor, Second District.

The following is the report of the Councilor for the Third District:

To: THE HOUSE OF DELEGATES

The third district is well organized and the great majority of physicians are more active in their county organizations than heretofore and attention given to legislative matters is most encouraging.

The indigent problem is being taken care of in a fairly satisfactory manner; the low income group is giving all of us the headache and we are listening for word from the Committee on Medical Economics.

Nothing further to report except a gradual improvement in the morale of our members.

> Respectfully submitted, E. C. Duncan, Councilor, Third District.

The following is the report of the Councilor for the Fourth District:

To: THE HOUSE OF DELEGATES

Shawnee, Osage, Wabaunsee, Lyon, Coffey, Chase, and Morris Counties.

There are five organized societies in the district.

Shawnee County had 134 members in 1936, have 116 in 1937 and had eight meetings in 1936, and had four in 1937.

Average attendance in 1936 was sixty-three, average for 1937 is sixty-one.

Osage County Society, organized, March 1936 with nine members, have eight in 1937. Had seven meetings in 1936, have had two in 1937. Average attendance in 1936 was seven, average for 1937 is seven.

Wabaunsee County. organized March, 1936, ten members, have nine in 1937. Had eight meetings in 1936, have had three in 1937. Average attendance in 1936, eight members, also eight for 1937.

Lyon County Society, had forty-one members in 1936, have twenty-four for 1937. Had ten meetings in 1936, had four for 1937. Average attendance for 1936 was twenty-six, for 1937 is twenty-two.

Coffey County, five members in 1936, five for 1937. Had three meetings in 1936, one in 1937. Average attendance, four.

There are about forty eligible physicians in these seven counties that are not members of any society.

Respectfully submitted,

J. L. Lattimore, M. D. Councilor, Fourth District.

The following is the report of the Councilor for the Fifth District:

To: THE HOUSE OF DELEGATES

Your councilor of the fifth district has nothing of importance to report. Things in this district are substantially the same as a year ago.

Respectfully submitted, M. Truehart, M. D., Councilor, Fifth District.

The following is the report of the Councilor for the Sixth District:

To: THE HOUSE OF DELEGATES

The Sixth District is composed of nine counties as follows: Kingman, Sedgwick, Butler, Greenwood, Elk,



Chautauqua, Cowley, Sumner and Harper. There is a county society organization maintained in each of these counties and the organizations in five of the counties—namely, Sumner, Cowley, Butler, Greenwood and Sedgwick—are quite active.

The necessity of an active medical society in each county becomes more apparent each year and if the profession is to maintain its position in the county and state affairs, the physicians in each county must cooperate in the development in an active county medical society.

Respectfully submitted, Henry N. Tihen, M. D., Councilor, Sixth District.

The following is the report of the Councilor for the Seventh District:

To: THE HOUSE OF DELEGATES

Washington County reports that they have had regular monthly meetings throughout the year with the exception of the summer months when they were discontinued. They have had a number of guest speakers but have furnished the programs from their own membership for the most part. This society sponsored a crippled children's clinic in Washington in September, 1936.

Riley County reports that they have had threee meetings during the past year. Two of these were scientific programs with guest speakers and one was a business meeting. The immunization of children against diphtheria in Riley County was a public health project which was sponsored by the society during the year.

Republic County reports that they have had regular meetings throughout the year with the exception of the summer months. These meetings have combined a social time together with a round table discussion of interesting and instructive cases together with a discussion of medical affairs in general. They have given assistance to the auxiliary in putting the cancer campaign before the public in that county.

Cloud County reports an active year with four meetings. These meetings have been held in conjunction with some other professional activity, the American Red Cross. the Post Graduate Meetings of the State Society and the Second Annual Cancer Control Program of the state society. An active medical auxiliary was formed in their county. A crippled children's clinic is planned for April, 1937 and will have been conducted before this gets to press.

Clay County reports regular monthly meetings with the exception of two summer months. The meetings have been business meetings followed by a scientific program presented by some guest speaker. The society sponsored a county wide program for tuberculin testing all children between the ages of eight and eighteen.

Mitchell County-No report.

Jewell County reports only one meeting during the year for the election of officers. No public health activities were reported.

The Seventh District is able to report a very active year in general. Considerable time and effort was spent by individuals and the societies in the district in the recent legislative activities. Nearly all counties reported some activity which was in the interest of public health. Each and every county seems to have one or two desir-

able men who are not active members of the society and there are a few men reported in the district who are undesirable.

Respectfully submitted,

F. R. Croson, M. D., Councilor, Seventh District.

The following is the report of the Councilor for the Eighth District:

To: THE HOUSE OF DELEGATES

It is our belief that the affairs of medical organization in the Eighth District are in particularly good shape. Membership is nearly maximum and all counties have been active during the past year in scientific, economic and business functions.

Respectfully submitted,

L. S. Nelson, M. D., Councilor, Eighth District.

The following is the report of the Councilor for the Ninth District:

To: THE HOUSE OF DELEGATES

I wish to submit the following report of this district:

Number of paid up members, forty.

Number of new members, three.

Number of deaths, none.

Number of meetings, six.

The district is functioning quite well through the county representative plan, in relation to the state society.

The cancer movement is taking root and the interest is increasing.

Respectfully submitted,

W. Stephenson, M. D., Councilor, Ninth District.

The following is the report of the Councilor for the Twelfth District:

To: THE HOUSE OF DELEGATES

I hereby submit the following report of the Twelfth District.

Under the new arrangement the Twelfth District consists of seventeen counties of Southwest Kansas, in which there are only four County Medical Societies, namely, Seward, Finney, Comanche, and Ford County.

These societies are all active and hold monthly meetings. They all have regular programs excepting Comanche County which has an organization principally for business and legislative purposes. Most of these Southwest Counties have only one or two M. D's. and hence are affiliated with their nearest active Medical Society.

With one exception we have one hundred per cent membership in Southwest Kansas. Finney County Society cooperated in the State Cancer Program held April 17, at which time they had both a very successful scientific and a quite successful lay meeting.

It is my opinion that the doctors that have been delegated as representatives of the state society have been of substantial assistance particularly in legislative matters. We have found them responsive to all requests made of them

I would like to recommend that these representative contacts be continued.

Respectfully submitted,

N. E. Melencamp, M. D., Councilor, Twelfth District.

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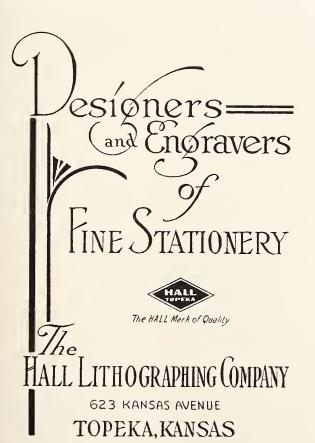
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The following is the report of the Committee on Medical Economics:

To: THE HOUSE OF DELEGATES

Your Committee on Medical Economics begs to submit the following report:

At the outset of President H. L. Snyder's administration the Committee was enlarged and during the past year eleven of our members have served on this Committee. Our President further suggested that the influence of the Committee should be felt in every county medical society. In order to accomplish this result each Committeeman was asked to assume the Chairmanship of a Sub-committee, drawing its members from those county medical societies located immediately adjacent to the residence of the Chairman. At least sixty-five of our county medical societies have been represented in this work. Medical economics problems of general interest and importance were allocated to sub-committees for study. For example, such problems as

"Professional Medical Economics Information,"

"Pre-payment Plans,"

"Survey of Kansas Problems,"

"Socialized Medicine Debate Survey,"

"Social Security Act,"

"Medical Economics Legislation,"

"Subsidized Groups,"

"Non-subsidized Law Income Groups,"

"Secure Groups,"

have been receiving simultaneous study by our subcommittees during the past year.

As a result of former studies your Committee has been of the opinion that further planning with particular reference to indigent care was futile until such time as we fully appreciate the scope of such a problem and know just how and to what extent the provisions of the Social Security Act will operate in Kansas. Needless to say, indigent care remains our greatest problem.

Legislation enacted during the recent session of the Kansas Legislature provides that the Board of County Commissioners within a given County shall constitute the "Local Welfare Board" and that the State Welfare Board shall cooperate with county officials for providing medical care to needy persons, thereby making possible agreements with county medical societies for doing this work on some agreeable compensation basis.

Inasmuch as the provisions of the Social Security Act are so largely dependent upon medical and surgical services for lawful functioning, it is the recommendation of your Committee that this Society take immediate action relative to the appointment of a Medical Advisory Board composed of five quailified men whose duties shall consist of advising the State Welfare Board in all matters of medical or surgical importance. Legal provision for such a Board is not made; however, it is the opinion of your Committee that problems affecting the needy, aged, the blind, the crippled, maternal and child welfare of necessity cannot be solved without the advice of such an Advisory Board. Therefore as a Society we should be in a position to give advice as such times as it may be sought.

Regardless of our personal opinions relative to the merits of Social Security Legislation, the law is now operative in Kansas and knowing its provisions as we do, it would seem that Kansas medicine is in a position to do real constructive work in the further development

of indigent plans, in the field of preventive medicine, in maternal and child welfare movements as well as in the advancement of lay educational endeavors. It is the further opinion of your Committee that such an opportunity must not be disregarded at this very critical period of our experience. Foundations which have championed the cause of socialized medicine are more active today than ever before and our one weapon of defense is the rendition of efficient service in all fields of medical endeavor.

Inasmuch as the development of plans providing for the needy is made mandatory upon both state and county Welfare Boards and inasmuch as these boards will counsel with both state and county medical units relative to the merits of various plans contemplating the care of the needy and sick it is the further recommendation of your Committee that a manual setting forth acceptable as well as objectionable "Indigent Plans" be compiled and submitted to the Council for approval or rejection as the case may be and if approved each county medical unit regardless of the enormity or peculiarity of their indigent problem would have a partially standardized workable program capable of future developments and one which would meet the requirements of ethical practice.

Your Committee is not unmindful of the even greater problems attendant upon semi-indigent care. The problem of Credits and Collections, has been given careful study during the past year. If it is the will of the Society a manual setting forth the subject of Credits and Collection will be prepared and if found to be worthy of your consideration it can be available to those interested in the problem. Your Committee recommends the development of such a manual.

The problem of lay and professional education in matters pertaining to medical economics is of prime importance and it is further recommended that sectional meetings devoted to the discussion of such matters be held at least twice a year throughout the state.

There is much work to be done. We are fortunate in this regard. Medical and surgical responsibilities are upon us in larger measure than ever and as always these responsibilities will gravitate to those best able to shoulder them. It is the prayer of your Committee on Medical Economics that we may face this work as individual practitioners of medicine, anxious to render a service in a time of need and as a Society face our problems courageously, willingly, and intelligently, making an honest effort to convert our real and imaginary troubles into stepping stones leading to greater success.

Respectfully submitted,

F. L. Loveland, M. D., Chairman Medical Economics Committee.

The following is the report of the Committee on Public Policy:

To: THE HOUSE OF DELEGATES

In Kansas City last May the House of Delegates voted that our committee should sponsor a basic science law in the 1937 session of the legislature. We decided on the A. M. A. bill which with some modifications was introduced. The results were reported to you in full in our bulletin number thirteen sent to all members.

We had numerous committee meetings with full attendance and frequently various other members were

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PELLETIER'S

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called upon for advice. We knew many things would demand our attention during the 1937 session of the legislature and Munns was on the job night and day, doing far more work than could be reasonably expected of any executive secretary, and to him goes the credit for putting The Kansas Medical Society on the map, "legislatively speaking".

We issued four bulletins, several of them going to all members, the others to presidents and secretaries and to a designated member in those counties without a county organization.

Inasmuch as legislative bulletin number thirteen covers the legislative session. I shall not discuss its contents here but refer you to that bulletin.

I want to thank our members for their splendid cooperation; the officers of The Society; Munns; the committee members who cooperated one hundred per cent; and last but not least, our Doctors Von Trebra, Kimble and Leslie of the House of Representatives, and Doctor Carter, Senator, who were for us and the people every step of the way.

This committee feels its inadequacy and helplessness but sustained by the support we were receiving, we did what we could.

But we cannot rest on past performance!

Tenshun! Right dress! Front! Forward march! Double time! March! If you get what I mean!

Respectfully submitted,

E. C. Duncan, M. D., Chairman, Committee on Public Policy.

The following is the report of the Committee on Public Health and Education:

To: THE HOUSE OF DELEGATES

This committee has had no formal meeting during the year though its members have maintained more or less contact with each other and have worked along the line and on the program we agreed upon at the Winfield meeting last year.

We have considered that the public health phase of our work is routinely best done by a steady support and intelligent cooperation with the State Board of Health, and we have accordingly tried to do just that. If any special situation should develop in which this committee could render some special service, it stands ready to do so. During the year, no epoch making discovery has been made, no pandemic of serious disease has occurred, and so no particular work for us as a public health agency.

In the matter of public education, we have lent such support as we could to the activities of the committees on cancer, tuberculosis, and venereal disease, respectively. All this has been done as a matter of course and little or no more is or should be expected of a member of this committee than from any other informed and loyal member of The Society and all members are expected to qualify in both information and loyalty.

With the present swing toward the socialization of medicine, there may reasonably be expected a general lessening in the height of popular esteem for the individual medics and for the profession as a whole. In the public mind, the socialization of anything is almost synonymous with taking it into politics, and in the same mind, self-seeking and other unpleasant attributes

are always associated with politics. In the profession itself there is a natural tendency to concentrate on medicine to the exclusion of citizenship and this, unfortunately, gives an added impetus to the growing feeling that we have been overestimated (Note the serial attack now running editorially in the Ladies Home Journal.)

With the idea of restoring the members of the profession to the positions of prominence and general leadership that we believe rightly belong to them, this committee has sought to organize and promote to the communities of Kansas a speakers bureau in which the speakers offered would be almost or quite one hundred percent physicians and the subjects treated would have the widest range. We have believed that such a program would materially enlarge the knowledge and understanding of our own members, would make the public conscious of them as educated and cooperative citizens, and would raise the general level of confidence in and respect for medicine. Following this idea, we have prepared report sheets asking the secretaries of the component societies to list their members and the subjects on which they make creditable appearances. Up to now there has been little or no response and we are beginning to suspect that the leadership of the committee in this matter is so badly inhibited that it is almost sterile.

Many of the school boards in small towns and of the Boards of Education in the larger places include doctors and not a few of them have some sort of recognition of a school physician. Beside these, there are a great many city school nurses, and county school nurses. These individually and collectively tend to make the citizenry medicine conscious and medic conscious, but they also grease the ways, as it were, for their socialization.

The committee would deprecate any lessening of professional interest or professional study, but it does urge an increase in study of community affairs and greater participation in the solution of community problems.

Respectfully submitted,

H. L. Chambers, M. D., Chairman.

J. N. Sherman, M. D.

V. E. Chesky, M. D.

F. A. Kelley, M. D.

E. D. Ebright, M. D.

The following is the report of the Committee on Medical School:

To: THE HOUSE OF DELEGATES

Your committee on the Medical School wishes to report as follows:

The Medical School and the University of Kansas Hospital continue to enjoy the highest rating by all standardizing agencies. The most recent survey by the Council of Medical Education of the American Medical Association and the Association of American Medical Schools has not been rendered. The comment of the investigators was, on the whole, commendatory.

Limitation of the various classes remains at seventy seniors, seventy juniors, seventy-five sophomores and eighty freshman. Occasionally a part-time student is admitted, whose admission accounts for the discrepancy between these figures and published statistics. Five hundred applications for admission to the Medical School were received during the Summer of 1936. One hundred ten of these applications were from qualified residents of Kansas and of these, eighty-two were admitted.



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Seven applicants, residents of Kansas City, Missouri, were admitted in return for the use of the contagious ward and the psychiatric pavilion of the General Hospital. Students are admitted largely on their scholastic records. There were twelve residents from the State of Kansas who were denied admission although they met the minimum requirements listed in the catalogue.

A total of ninety nurses in training are admitted. All student nurses reside at Hinch Hall, the nurses' residence, and the graduate nurses reside outside the hospital. The limitation to ninety student nurses is qualified by the accommodations of the nurses' home. There has recently been an affiliation arrangement with the Kansas State College at Manhattan and the College of Liberal Arts at Lawrence whereby girls who have completed three years of college work can enter the nurses' training school where, at the end of two and one-half years, they will be granted an A. B. degree in Home Economics and a degree of Registered Nurse.

It is obvious, therefore, that in the near future the training school will consist largely, if not entirely, of girls who have had three years of college work.

The physical plant at the campus in Kansas City has undergone a number of changes during the past year. Four additional units have been added. Two of these are in use at the present time. These two buildings are the warehouse, costing \$18,000.00 and the Hixon Laboratory for Medical Research, costing \$65,000.00. Of the latter, \$25,000.00 of the cost was obtained by a private gift, the remainder being supplied out of the fee balance and the WPA. The other two buildings, the Children's Pavilion and the Clinic Building, are not occupied. The outer portion of each of these buildings is complete, but several floors are yet unfinished. The Clinic Building, a four story building and into which the Out-Patient Department will be moved from the present temporary building, has cost, so far, \$135,-000.00. The Children's Pavilion is a five story building costing \$109,000.00. The recent legislature appropriated \$100,000.00 for the connecting corridor to connect the Clinic Building with the main hospital and provided also \$75,000.00 for a negro hospital which will enable the removal of the negro patients from the wooden temporary building. In addition to these two appropriations, the legislature approved a fund of \$37,-000.00 for an additional boiler and improvements in the power plant. The completion of the connecting corridor will permit the removal of the Radiological Department from its present cramped quarters to the second floor near the Clinic Building.

Landscaping of the grounds has continued as one of the WPA projects. The Federal Government has provided, in all, \$287,000.00 toward the improvement of the institution: a last grant of \$87,000.00 to provide additional landscaping was made in the Fall of 1936. There have been two additions to the faculty during the past year. Dr. Ralph M. Fellows, to the Department of Psychiatry and Dr. C. F. Taylor, to the Department of Medicine. Dr. Fellows offers lectures in psychobiology and Dr. Taylor lectures on tuberculosis.

The faculty has lost two members by death; Dr. J. L. McDermott, who instituted and developed the Radiological Department, died as a martyr to his specialty from an infection developing in a roentgen keratosis on one of his fingers. Dr. Roy L. Mills, one of the most inspiring teachers of physical diagnosis, died of bacterial endocarditis.

The Out-Patient Department continues to be one of the most active departments of the University; 67,893 dispensary visits were made in 1935-6 in comparison to 61,181 during 1934-5. A venereal clinic has been established by funds made available through the Federal Social Security Act. The development of a maternity center under the same act for the care of indigent patients is contemplated.

The Social Service Department has recently received a partial reorganization and a more adequate Social Service is planned as funds are available. This department is attempting the investigation and approval of patients admitted to the dispensary in an effort to correct the abuses of this rapidly growing department. During the period from January to July, 1936, 1,338 eligibility investigations were made as compared to 3,960 during the same period in 1936.

The Hospital is running to capacity. The average bed occupancy is 207. Eighty percent of the beds are of the ward type. There have recently been added forty-two beds by the addition of the tuberculosis section. This addition was brought about by the renovation of the old Dispensary Building. Thirty beds of the forty-two are occupied by patients consigned from Norton. The tuberculosis section is called the Eleanor Taylor Hospital, located at the old building site and so named to honor the wife of the founder of the Medical School.

During the year a committee from the faculty of the Medical School was appointed by the Dean for the purpose of accumulating facts relative to criticisms of policies and procedures of the University of Kansas Hospital and the Out-Patient Department. The study by the committee was exhaustive, including a compilation of returned questionnaires from the members of the Wyandotte and Johnson County Medical Societies and a comparative resume of information obtained by questionnaire from twelve tax-supported Medical School Hospitals. The product of this committee's work and its recommendations appear most valuable in qualifying the policies of the University of Kansas Hospital and the Out-Patient Department as well as their relation to the medical profession at large. A complete set-up concerning the admission of all patients, both to the Hospital and the Out-Patient Department was submitted and which placed on the Social Service Department, as a Department, the responsibility for the proper classification of indigent and semi-indigent patients. The plan further contemplates the continuation of eligibility classification after the initial admission. The plan appears most commendable.

The committee included a recommendation whereby adequately salaried, full-time department heads might be realized. From the standpoint of the relation of the University of Kansas Hospital and the Out-Patient Department to the profession as a whole, the result of such a plan appears most desirable.

The relation of the University of Kansas Hospital and the Out-Patient Department as competitive institutions to other hospitals in the state was emphasized in the committee's report. As previously reported by the Medical School Committee, the Committee feels that every effort should be made by the University of Kansas to avoid unfair competition in the conduct of both the Hospital and the Out-Patient Department to other hospitals and other physicians in the state; rather it should be conducted as a model of ethical professional and hospital practice.

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This Committee is convinced, also, that the study by the Medical School of the criticisms coming from physicians in the state and the revamping of policies to avoid criticism and insure fairness in practice is praiseworthy. Such an attitude should create for the University of Kansas the high degree of cooperation desired in its relations to the profession as a whole.

The Medical School and its faculty continue to offer the facilities of post-graduate instruction. The annual Spring Post-Graduate Clinic, covering three days, was attended this year by more than one hundred physicians. Twenty-one prepared papers were given and five operative clinics were held. The two evening meetings during the Clinic were occupied by the Porter Lectureship. Dr. Chevalier Jackson of Philadelphia gave these lectures. The Committee feels that the post-graduate effort on the part of the Medical School might well be enlarged. Speakers are available from the rather large faculty on almost any medical subject before county societies. These speakers will be glad to appear if a request is addressed to the Dean. Travel expense only is requested.

On the whole, the Medical School Committee believes that we, as a State Society, may be justly proud of the standing and operation of our Medical School and that financial support should continue to the end that the forward-looking policies as contemplated may be realized.

Respectfully submitted,
Lewis G. Allen, M. D., Chairman.
L. S. Nelson, M. D.
A. R. Chambers, M. D.
Ivan Burkett, M. D.
L. R. McGill, M. D.
Committee on the Medical School.

The following is the report of the Committee on Scientific Work:

To: THE HOUSE OF DELEGATES

We, your Committee on Scientific Work, report as follows:

- 1. There has been developed a reasonably complete catalogue of scientific offerings by the firms which advertise in our Journal. It has been made clear to them that we can use in this way only scientific matter and that on our programs mere sales talk would be inappropriate and undesired. The advertisers have seen our viewpoint and cooperated in a fine way. Some of the listings have been utilized in county and other medical meetings and always with satisfaction.
- 2. Our attempt to get up a roster of doctors and subjects from our own membership has not succeeded so well. We feel a little chilled in our enthusiasm about getting our members to recognize and respect each other and in so doing to increase the standing and influence of our members and of our Society in the minds of the public, but we still believe the idea to be basically sound. Its converse is also true,—namely, that if we do not and/or cannot "see" each other, we should not expect the public to see us.
- 3. While the By-Laws seem to make it one of the duties of this committee to provide and arrange the program for the Annual Meeting, the experience of the last two general meetings makes us to believe that the local committee in the meeting place could and would

do this work better than we could. We have, therefore, given way this year to the Topeka Committee. At the time of this report, there is every indication that its work will be pleasing and satisfactory.

Respectfully submitted,

H. L. Chambers, M. D., Chairman

L. B. Gloyne, M. D. L. L. Bresette, M. D.

Committee on Scientific Work.

The following is the report of the Committee on Hospital Survey:

To: THE HOUSE OF DELEGATES

The Committee on Hospital Survey has not functioned during the past year owing to the fact that there were no matters demanding attention sufficiently important to warrant calling the committee together.

During the year of 1936 there were 117 registered hospitals operating in Kansas. This is seven less than in the year of 1935. Thirty hospitals were refused registration by the American Medical Association because of their failure to meet the minimum requirements of that organization. This is two less than were refused registration in 1935.

It is interesting to note that the governmental hospitals in Kansas have double the capacity of the nongovernmental hospitals, the former having 9,776 beds as against 4,453 beds in the latter. The governmental hospitals are filled to capacity owing to the fact that their patients remain in the hospital for much longer periods of time, the average being ninety days.

These hospitals are caring for the majority of hospitalized patients suffering from tuberculosis, mental diseases, and those cases requiring custodial care. On the other hand, there are many idle beds in the nongovernmental hospitals of the state and it is quite apparent that there is no need for any increase in hospital beds in non-governmental hospitals in Kansas.

There are six hospitals in the state approved by the American Medical Association for general internships and three approved for residencies in specialities.

Fifty-six hospitals have M. D's. at the head of their pathological laboratories and seventy-four have physicians in charge of their x-ray departments.

In the Hospital number of the Journal of the American Medical Association the Council on Medical Education and Hospitals has presented much factual data regarding the hospitals of the country. Reference is made to this Journal for detailed information, not only for the hospitals of Kansas but of the nation at large.

Respectfully submitted,

E. S. Edgerton, M. D., Chairman, Committee on Hospital Survey.

The following is the report of the Committee on Medical History:

To: THE HOUSE OF DELEGATES

The historical report of the Society for the year 1936-1937 indicates that further progress was made in the disposal of many important problems.

The efforts toward socialization of medical practice continued throughout the year. Many of the founda-

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tions and similar groups issued new studies and new propaganda on this subject. There appeared, and is still pending in the Congress of the United States, a health insurance measure introduced by Senator Arthur Capper of Kansas, wide in its effects of medical service. It is believed, however, that the profession has made great strides in its efforts to show the public the dangers of costly experiments of this kind.

In its own legislative term, the Kansas medical profession was particularly active. It succeeded in passing a law adding the remedy of injunction to the Medical Practice Act and it passed, in amended form, a Basic Science Law which should ultimately prove to be of great protection to the public. It was active in advising upon medical problems incidental to the Social Security Act passed in that term of the legislature, and it aided in repulsing several proposals inimicable to public health.

For the first time in the history of American Medical Association meetings, a meeting of that body was held adjacent to Kansas. The Kansas profession served as co-hosts for the meeting and the Kansas registration of 1,001 members was the highest per capita of any state.

The federal government participated extensively in maternal and child welfare and public health services during the year, and the officers and committees of The Society were active in that regard. Two postgraduate courses on obstetrics and pediatrics financed through these funds were presented in northwest and north central Kansas.

Considerable activity was devoted to cults and quacks. Investigators assembled information concerning certain illegal practitioners and a considerable number of prosecutions were based upon this evidence. Steps were taken toward clarification of the rights of practice of particular professions in Kansas.

Medical economics continued to be of prominent interest in the practice of medicine. Much headway was made in the institution and adoption of satisfactory methods for care of the indigent and wide studies were commenced in the other fields of this subject.

The Society inaugurated a system of liason committees to provide greater aid to the agencies interested in public health and also a plan of official representatives wherein local organization was attained in all counties of the state. New committees appointed during the year included one on Tuberculosis and one on Venereal Disease. A second Cancer Control Program was sponsored with Dr. Louis C. Kress, Buffalo, New York, and Dr. Frank L. Rector, Evanston, Illinois, as speakers for six professional and six public meetings in geographic centers of the state. The Committee on Scientific Work inaugurated an extensive speaker's bureau for the profession. Many of the county medical societies were active in public information meetings and campaigns.

Two projects of the Society attained considerable national recognition. One, the Basic Science Law brochure published by the Committee on Public Policy and the other, the program of the Venereal Disease Committee.

Governor Alfred M. Landon believing that a doctor of medicine could contribute to the scientific functions of the Board of Regents was kind enough to appoint Dr. H. L. Snyder to that important position.

Membership in 1937 reached 1,499 which is one of the largest years in the history of The Society.

All in all this Committee feels that The Society has had a good year in 1936-37, that it accomplished many things of particular value to its membership, and that it has made progress toward many greater things in the future

Respectfully submitted, W. S. Lindsay, M. D., Chairman. Committee on Medical History.

The following is the report of the Committee on Venereal Disease:

TO: THE HOUSE OF DELEGATES:

Your Committee on Venereal Disease held a meeting at the Kansan Hotel. On account of the short notice given the membership, a number were unable to attend, but those who did come were enthusiastic about the tentative plans of the committee.

Briefly, the committee undertakes a campaign of education, not only for the laity, but also for the profession. They anticipate a plan by which a more workable arrangement may be perfected between the various boards of county commissioners and the medical profession thru which adequate care may be furnished indigent venereal diseased patients on some basis of compensation fair to all concerned.

The committee has received the assurance of the Editorial Board of The Journal that a regular space will be available in The Journal for pertinent venereal disease literature.

The committee is anticipating the publication of a brochure or pamphlet, setting forth in a simple manner the rudiments of venereal disease recognition, control and treatment. This brochure will be sent free to all members of the State Medical Society.

Because the various members of this committee are geographically widely separated, it has been difficule to have a meeting of all the members, and it is to be hoped that a full meeting may be arranged during the session of The Kansas Medical Society.

Respectfully Submitted, Arthur D. Gray, M.D., Chairman, Committee on Venereal Disease.

The following is the report of the Committee on Auxiliary:

TO: THE HOUSE OF DELEGATES:

Report of the Auxiliary Committee-

The Woman's Auxiliary of the Kansas Medical Society has done work helping in several of the different committees which you will see in reading Mrs. L. B. Gloyne's report to our Auxiliary Committee.

It is our wish that the counties who are not enjoying the cooperation of the ladies society insist that they have an auxiliary in their county.

For the committees who have felt the help of the Auxiliary during this last year. I wish they would write their appreciation to the State President, Mrs. L. B. Cloyne.

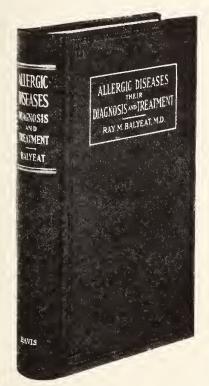
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Associate Professor of Medicine and Lecturer on Diseases Due to Allergy.
University of Oklahoma Medical School; Chief of the Allergy Clinic.
University Hospital; Consulting Physician of St. Anthony's
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XXXV. Gastrointestinal Allergy.
XXXVIII. Allegric Dermatoses (I. Eczema, II. Contact Dermatitis).
XXX. Drug Therapy as a Palliative Means in the Treatment of Hay Fever and Asthma.
XXXVII. Migraine.
XXXVII. Urticaria |Hives).
XXXIV. Fungus Infection and Its Allergic Phase.
XXXIV. Allergic Conjunctivitis.
XII. Eliminative Measures in the Treatment of Food-Sensitive Patients.
XXVII. Eliminative Measures and Desensitizing Methods in the Treatment of House-Dust-Sensitive Patients.
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Respectfully Submitted, E. J. Nordurfth, M.D., Chairman, Committee on Auxiliary.

The following is the report of Mrs. L. B. Gloyne, President of the Auxiliary:

TO: THE COMMITTEE ON AUXILIARY:

Kansas has twenty-two organized counties. Eleven auxiliaries in Central Kansas represent the twelve counties of the Central Kansas Medical Society. One county disbanded during the past year. Two new counties, Salina and Cloud, were organized in March. 219 paid memberships were sent to the American Medical Auxiliary.

Efforts in organization to strengthen our number have been carried on through correspondence with the councilors, and by the president of the auxiliary to the president of county societies where there was no auxiliary.

One of the aims that has been stressed this year has been the importance of the auxiliary members educating themselves along health matters in order to provide the uninformed with accurate information given in an interesting way to promote health.

Due to the untiring efforts of our state chairman, much outstanding work has been accomplished with Hygeia this year.

Kansas has not only greatly increased the number of subscriptions but has gained a clearer vision of the value of Hygeia. The auxiliary obtained 183 subscriptions.

Much educational work has been done in the counties by having physicians speak on medical subjects at their auxiliary meetings. Reviews, lectures, slides, study envelopes and radio broadcasts have been sponsored.

Health programs, plays and essays have also been carried on by auxiliary members in literary clubs, P. T. A. organizations, business and professional women's clubs. The auxiliary has assisted the Red Cross, Cancer Control Campaign. Boy Scout and Girl Scout, needy children, and many other civic and philanthropic projects. Vicecommanders from six counties were appointed to assist the Women's Field Army for the Control of Cancer.

It was through the efforts of our efficient Chairman of Press and Publicity that the work of our auxiliary has been so carefully conveyed to you.

The auxiliary pages of The Journal contained communicative and informative articles from the various officers and chairmen.

The work of the Public Relations Committee in every county has been encouraging. This work has been promoted by active speakers bureaus; sending of letters to lay organizations telling of this service and inviting them to ask for speakers; preparing mailing lists to be used among lay organizations for distributing health literature; assisting in State Health Board Projects; assisting speech clinics: helping the Cancer Control Program; and aiding county doctors in giving diphtheria immunization and vaccinations.

Since legislature met this year, the chairman of our advisory committee and the Executive Secretary of the Medical Society met with us at our state board meeting in November to give us their plans for our help in legislative matters.

We were asked to give one lesson in our meetings to the reading and studying of the Basic Science Law in order that we might ourselves become informed and familiar with the contents.

The Basic Science Law was presented to most of the auxiliaries and several of them did some work among lay groups in favor of this law.

It was my privilege to attend the Fourteenth Annual Convention of the Woman's Auxiliary to the American Medical Association held in Kansas City, Missouri, May 7 to 11, 1936, and the National Board meeting in Chicago, November 16.

It was a pleasure to visit and speak to five auxiliaries during this past year. Everywhere I received a friendly and cordial greeting. At these meetings the same idea, that has been stressed throughout the year with all the auxiliaries was enlarged upon. This idea being the need of a friendly auxiliary based on genuine cooperation, the cordial comradeship among the doctors' wives and the necessity of pushing aside any petty jealousies that might exist and moving forward to the major objectives of the auxiliary.

No action of major importance has been taken without consulting the advisory chairman.

The assistance and cooperation of the various members of the medical society has made our attempt to carry out the wishes of the society a pleasure.

The surface has merely been scratched in the service that the auxiliary could and would be willing to render the medical society. There are numerous counties where an auxiliary would be organized if the local medical society was convinced of the need in their community.

In my opinion the medical society might find it advisable to appropriate funds to cover traveling expenses of someone to appear before the various medical societies and bring out the value of the auxiliary and help in the actual formation of auxiliaries in the large field that has been untouched so that the Kansas Auxiliary could take a place equal if not superior to the auxiliaries in so many other states where auxiliary work has been outstanding.

Respectfully Submitted, Mrs. L. B. Gloyne, President Auxiliary. To The Kansas Medical Society.

The following is the report of the Committee on Maternal and Child Welfare:

TO: THE HOUSE OF DELEGATES:

The foremost activity of your Committee on Maternal and Child Welfare during the past year has pertained to the maternal and child welfare portions of the Social Security Act. An effort was made to assist the Kansas State Board of Health in the preparation of plans for this purpose, and the Committee also aided in the sponsorship of the two obstetrical and pediatric postgraduate seminars financed through Social Security Act funds and held in western and north central Kansas. It is our belief that the Social Security Act will continue to be expanded in this direction during future years and that this Committee may be able to serve in many helpful ways in that connection.

Dr. H. R Ross, Director of the Division of Maternal and Child Welfare was kind enough to request the suggestions of this Committee for a revision of the Kansas

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★ Proc. Soc. Exp. Biol. and Med., 1934, 32, 241-245
 Laryngoscope, Feb. 1935, Vol. XLV, No. 2, 149-154
 N. Y. State Jour. Med., June 1935, Vol. 35, No. 11
 Arch. Otolaryngology, Mar. 1936, Vol. 23, No. 3
 Laryngoscope, Jan. 1937, Vol. XLVII, No. 1, 58-60

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N. Y. State Jour. Med. 1935, 35— No. 11, 590; Laryngoscope 1935 XLV, 149-154. Proc. Soc. Exp. Biol. and Med., 1934, 32, 241-245. Laryngoscope, 1937, XLVII, 58-60.

SIGNED:		
ADDRESS		
CITY	STATE	
	· ·	A L A I

Mother's Manual. Assistance in that direction is being given at the present time.

Respectfully Submitted, John L. Grove, M.D., Chairman, Committee on Maternal and Child Welfare.

The following is the report of the Committee on the Stormont Medical Library:

To: THE HOUSE OF DELEGATES

Receipts and disbursements of the Stormont Medical Fund for the period from July 1, 1934 to April 1, 1937 are as follows:

Receipts							
Teccipis							
Interest rec'd, July 1, 1934- June 30, 1935	\$	26	4.7	9			
Interest rec'd, July 1, 1935-		22					
March 30, 1937		131	9	3			
TotalBalance on hand with State							
Treasurer, July 1, 1934	\$ 	21	8.0	6			
Total Expenditus	\$	83	6.5	6	\$	836	.56
		1.4		,			
July 1, 1934-June 30, 1935							
July 1, 1935-June 30, 1936		15	5.3	1			
July 1, 1936-March 30, 1937.		15	3.3	3			
Total	.\$	45	7.3	8	\$	457	.38
Balance on hand with State Treasurer, March 30, 1937 The summarized account o same period is as follows:	f	гхре				379 for	
Periodical	S						
November, 1934 (covering							
subscriptions for 1935)		\$	79	.35			
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Present periodical list of the Stormont Medical Library is as follows:

American Journal of Diseases of Children

American Journal of Medical Sciences American Journal of Public Health Annals of Surgery Archives of Internal Medicine Archives of Pathology Archives of Pediatrics Archives of Surgery Current Medical Digest Endocrinology Jackson County Medical Journal Journal of American Medical Association Journal of Kansas Medical Society Journal of Missouri Medical Association Medical Economics Medical Record Modern Medicine Quarterly Cumulative Index Medicus Surgery, Gynecology and Obstetrics Texas State Journal of Medicine

Your Committee desires to acknowledge with appreciation the cooperation of The Journal of The Kansas Medical Society in donating to the Stormont Medical Library all of its books received for review purposes. This contribution has caused to be placed in the library most all of the newest books published.

Your Committee in line with its reports of former years still feels that there is a service available to physicians in Stormont Medical Library which is not as fully used as it might be. We urge and invite all members to take advantage of these facilities.

Respect fully Submitted, Ralph M. Fellows, M.D., Chairman Committee on Stormont Medical Library

AUXILIARY

Edited by Mrs. W. G. Emery, Press Publicity Chairman

PRESIDENT'S MESSAGE

Dear Auxiliary Members:

The annual meeting of the Women's Auxiliary to The Kansas Medical Society will be held in Topeka, May 4, 5, and 6.

Since the Kansas Medical Auxiliary was organized in Topeka twelve years ago, we plan to make it a home coming week. This meeting is an excellent opportunity to renew old friendships, make many new ones and to share in the promotion of the desires of the state Medical Society.

I would like to urge every member to be present and on behalf of the State Auxiliary I extend a cordial invitation to all ladies accompanying members of the State Medical Society to share in the delightful program and events.

I would like to say that the ladies of Topeka, with Mrs. J. Theron Hunter as Chairman, have planned three days of lovely entertainment for us.

I would like to take this opportunity to express my sincere thanks and appreciation to the State Press and Publicity Chairman, Mrs. W. G. Emery, who has so un-

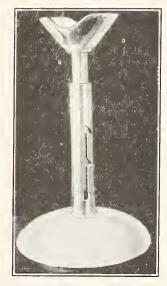
TO THE KANSAS MEDICAL SOCIETY

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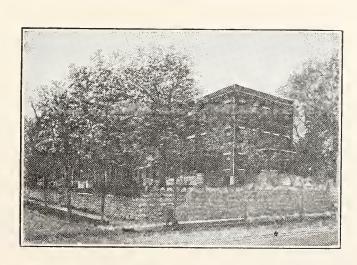
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tiringly worked to fill the space allotted us in the State Medical Journal with interesting and stimulating information.

Mrs. L. B. Gloyne, President.

With the May issue of The Journal there concludes the recording of the activities of the 1936-1937 season of the Women's Auxiliary to The Kansas Medical Socity by the present administration.

The Press and Publicity Chairman of the State Auxiliary has endeavored to give the auxiliary column a reasonable prominence in The Journal. She has received splendid cooperation, courtesy and aid from the Editorial Board and the managing editor of The Journal, Mr. Clarence Munns. Her appreciation and thanks is herewith extended for all their favors.

During several years of active official participation in auxiliary affairs this chairman has been forced to the conclusion that any assumption of 100 per cent cooperation by the membership must be discounted about 40 per cent. This is true whether one is chairman or officer, and is the experience of every officer with whom I have talked.

This press and publicity chairman has received news items regularly from half of the county auxiliaries. Two or three others have sent one or two items only. This coincides with the afore-mentioned percentage of cooperation.

The condition is not new. It has existed since the auxiliary was formed. However, it has never been publicized. It is done now, not in a complaining spirit, but with the hope that a better auxiliary page may result from having brought the fault out into the light.

HOTEL ACCOMMODATIONS FOR THE ANNUAL SESSION

If you have not yet attended to this necessary detail, look over the list of Topeka hotels given below with their rates and accommodations, and mail a request for a reservation at once to the manager of the hotel selected.

If there is any difficulty in getting adequate reservations write to the office of The Kansas Medical Society, Stormont Building, Topeka, or to Dr. Harry J. Davis, 704 Mills Building, Topeka, stating the type of accommodations desired, and the Committee on Hotel Accommodations will attempt to make arrangements for you, as nearly as possible to the quality and price you wish.

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4 blocks from Temple				
Without Bath	\$2.00	\$3.00		
With Bath	\$2.50	\$4.00	\$5.00	\$8.00
CAPITOL				
Fifth and Kaansas				
7 blocks from Temple				
Without Bath	\$1.25	\$1.75		
With Bath	\$1.75	\$2.25		\$4.00
THROOP				
Fourth and Kansas				
8 blocks from Temple				
Without Bath	\$1.00	\$2.00	j	
FIFTH AVENUE				
Fifth and Quincy	}		1	
8 blocks from Temple				
Without Bath	\$0.75	\$1.00		
With Bath	\$1.25	\$2.00		
COLONIAL				
222 East Fifth				
9 blocks from Temple				
Without Bath	\$0.75-\$1.00	\$1.50-\$2.00		

COMMITTEE IN CHARGE: H. J. Davis, M.D., Chairman

O. R. Clark, M.D.

G. F. Helwig, M.D.

B. J. Ashley, M.D.

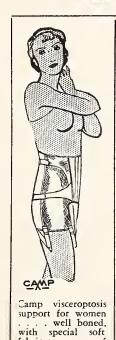
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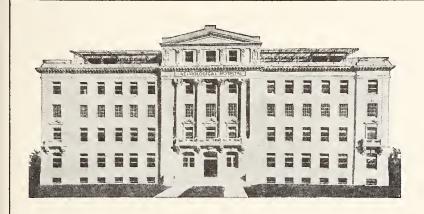
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The minimum daily intake which will prevent rickets in infants is probably between 135 and 400 International units of vitamin D as supplied by cod liver oil (1). The optimum prophylactic dose is probably in the neighborhood of 1000 International units (2). It is also interesting to note that the League of Nations Technical Commission has recommended a daily intake of 340 International units of vitamin D for pregnant and lactating women (3).

Irradiated pasteurized milk containing 135 International units per quart and irradiated evaporated milk of the same potency have been found equally effective in preventing rickets in infants. The pediatrician will be interested in the following summary taken from a recent review:

"Such evidence as is available may be interpreted to show that cod liver oil, cod liver oil concentrate milk, and irradiated milk are of equal potency for the human being, unit for unit." (1-b).

Other than the above recommendation for vitamin D intake during pregnancy and lactation (3), little definite information is available upon which to establish minimum vitamin D requirements of the human after infancy (1), yet while sunlight produces the anti-rachitic factor, most common foods are known to be deficient with respect to vitamin D (4). However, certain foods such as eggs, butter, liver and sea foods do supply this vitamin. The importance of sea foods, especially canned salmon, as carriers of vitamin D has been definitely established. A recent report on the vitamin D content of different varieties of canned salmon gave a value of 1.9 International units per gram for the least potent brand and 6 or more units per gram for several other brands (5).

From a consideration of the vitamin D values of salmon oil, the oil content of canned salmon and the quantity of canned salmon consumed annually in this country, it has been concluded that there is more vitamin D in the canned salmon sold in this country than in the cod liver oil used for both human and animal feeding (6).

Although neither the minimal nor optimal requirements of individuals of different ages are definitely known, the values of evaporated milk fortified with vitamin D and of canned sea foods as sources of this important vitamin, are well established.

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a. 1937. J. Am. Med. Assn. 108, 206
 b. 1936. Ibid. 106, 2150
 1936. J. Am. Diet. Assn. 11, 503

(3) 1936. League of Nations Report on Physiological Bases of Nutrition, League of Nations Publication Department, Geneva.

- (4) 1935. J. Am. Diet. Assn. 11, 119 (5) 1935. J. Home Econ. 27, 658
- (6) 1931. Ind. Eng. Chem. 23, 1066

This is the twenty-third in a series of monthly articles, which will summarize, for your convenience, the conclusions about canned foods which authorities in nutritional research have reached. We want to make this series valuable to you, and so we ask your help. Will you tell us on a post card addressed to the American Can Company, New York, N. Y., what phases of canned foods knowledge are of greatest interest to you? Your suggestions will determine the subject matter of future articles.



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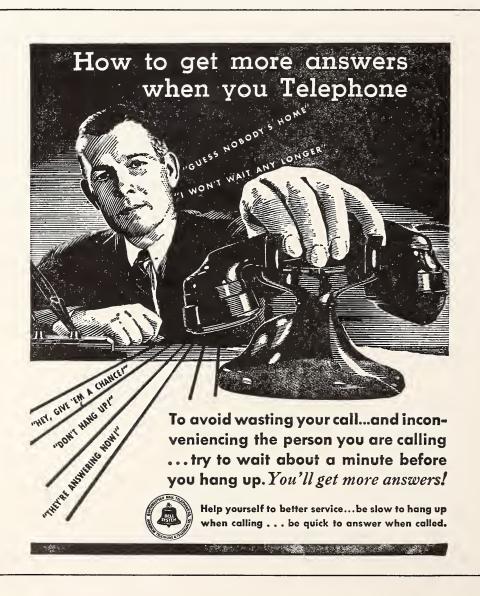
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ANAEROBIC PANOPHTHALMITIS*

J. F. GSELL, M.D.

and

GEORGE F. GSELL, M.D.

Wichita, Kansas

Intraocular infections caused by pathogenic anaerobes are uncommon. Occasionally cases are reported of tetanus resulting from a panophthalmitis of ectogenous origin. Some of these cases have terminated fatally. The gas bacillus (B. welchii) has been the invader in twelve reported cases of panophthalmitis caused by intraocular foreign bodies. Beery¹ reported the first such case in this country in 1932, and stated that he had found nine reported European cases. Walker², and Kluever and O'Brien³ have since reported cases. It is interesting to note that in spite of the virulence of gas gangrene in infections in other parts of the body, all of these patients recovered promptly after enucleation or evisceration of the affected eye. Perhaps this is due to the fact that the symptoms are so sudden and so violent that radical treatment (enucleation or eviscertation) is instituted early in the infection.

We are unable to find reports of panophthalmitis caused by the other pathogenic spore-bearing anaerobes.

REPORT OF A CASE

The patient, L. H., a well nourished male, age forty-six was seen in our office at four p.m., October 2, 1936. While cutting a steel cable with a chisel and hammer on the floor of an oil rig the previous day at four p.m., he was struck in the right eye by a foreign body. He immediately went to a physician in a distant town who suspected an intraocular foreign body. The physician was unable to locate such by x-ray and was unsuccessful in finding anything with an eye magnet. He applied atropine ointment and advised hot moist compresses and an antiseptic solution.

During the night the eye began to pain severely and when seen the following morning presented the picture of panophthalmitis. Examination of the patient in our office just twenty-four hours after the accident disclosed the following signs.

The skin over the right frontal, the zygomatic, and the temporal regions was swollen and inflamed. The lids were swollen, the tarsal and bulbar conjunctiva was chemotic, and there was a slight amount of white pus in the culde-sac. The eye was fixed and there was some proptosis. The eyeball was stoney hard. The cornea was dull and black red. The contents of the anterior chamber could not be distinguished. The patient complained of intense pain and looked sick. His temperature was normal.

The diagnosis of panophthalmitis was confirmed and he was sent to the St. Francis Hospital. A smear was taken from the conjunctiva, and a localizing x-ray revealed an intraocular foreign body 3x3x2 mm. He was given 25,000,000 killed typhoid bacillae intravenously and hot boric acid compresses were applied to the eye. His temperature went to 100.4 degrees and he had a chill after the typhoid injection.

The following morning, under general anaesthesia, the right eye was eviscerated, care being taken not to injure the conjunctiva. No gas was present when the eye was opened. The contents of the eyeball consisted of a hemorrhagic yellow-white mass, and in this mass was found a piece of steel 3x3x3 mm. When the eye was opened material was taken for aerobic and anaerobic culture.

The scleral wound was closed loosely, an antiseptic ointment was applied and the patient was sent to bed to continue hot applications. His general condition remained excellent, the swelling and inflamation of the socket subsided rapidly and he was dismissed from the hospital on the twelfth day.

^{*}Presented before St. Francis Hospital Staff November 23, 1936.

LABORATORY STUDIES

The smear from the infected eye showed many pus cells, no cocci, and occasionally gram-positive large bacilli. (No capsule). There was no growth observed in aerobic culture (Russel agar, blood agar and dextrose broth). In two anaerobic dextrose-agar culture tubes (Wright method), after twenty-four hours about twelve deep colonies, two to three mm. in diameter, whitish-yellow in color and star-like in shape were observed. In pure cultures were found motile rods, usually in pairs, joined end to end, and occasionally chains and long filaments. Many spores were found, situated near the middle of the body of the bacilli. The bacilli had convex ends and stained well by methylenblue. They were grampositive. The organisms varied between three and eight mikron in length.



Fig. 1. Culture from eye. Gram-positive bacillus, without capsule, growing in pairs strictly anaerobic. (x 1,000).

Acid and gas formation was observed in dextrose, levulose, maltose, galaktose. No acid and no gas in mannitol and salicin. A guinea pig was injected intramuscularly with a suspension of bacteria. It survived.

A bacteriological diagnosis was made of a motile, gram-positive bacillus which readily formed spores, caused no gas formation in solid culture media, and was strictly anaerobic. It had the morphological and cultural characteristics of clostridium oedematis. (C. A. Hellwig, M. D.)

COMMENT

The rapidity of onset and the acuteness of symptoms were typical of the cases of panophthalmitis caused by pathogenic anaerobes. Smear and cultures showed the causative organism to be an anaerobe which closely resembled clostridium oedematis (vibrion sep-

tique). It is probable that these pathogenic anaerobes have been the invaders in panophthalmitis before, but have not been reported, due to the fact that because they do not produce gas they are not suspected.

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THE TREATMENT OF ACUTE CHOLECYSTITIS

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The treatment of acute cholecystitis has almost reached the stage of controversy. Prior to about fifteen years ago there was quite general agreement among surgeons concerning the therapeutic management of this phase of gallbladder disease, but opinions have recently changed until now many eminent authorities are in disagreement. After carefully reviewing the literature there appears to be some justification for a difference of opinion. If printed records of results are to be accepted at face value it may be advisable to at least modify our former methods of treatment. It is the opinion of most surgeons at present that any patient having acute cholecystitis, who is rapidly growing worse, should be operated upon immediately. The difference of opinion has arisen in considering whether or not all acute cases should be treated by operation as emergencies or near emergencies.

Textbooks and monographs on the subject of gallbladder disease have very generally recommended that acute cholecystitis should be permitted to subside before resorting to operative treatment. Walton¹, in the 1930 edition of his "Textbook of the Surgical Dyspepsias" dissents from this opinion by stating that, "it is a remakable fact that although surgeons are generally agreed that an acute appendicitis should be treated surgically, since it is impossible to determine the course the disease will take, there are still many who advocate that an acute cholecystitis should not be operated upon until the acute symptoms have abated". He concludes that there seems to be nothing to commend this plan of treatment.

*University of Kansas School of Medicine.

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American authors who have ardently supported early operation are, Zinninger², Heuer³, Stone and Owings⁴, Royster⁵, Lund⁶, Finney⁷, R. H. Miller⁸, H. F. Graham⁹, Pratt¹⁰, Mentzer¹¹, Estes¹², and Alexander ¹³. Surgeons who have recommended delayed operation in acute cholecystitis are Lahey¹⁴, Lewis¹⁵, E. A. Graham¹⁶, Behrend¹⁷, M. K. Smith¹⁸, Bruggeman¹⁹, Bass and Bird²⁰, Flint²¹, Deaver and Burden²², and Branch and Zollinger²³.

To date the literature records a very small series of cases of acute cholecystitis which have been treated by operation within fortyeight hours after the development of an acute attack. The cases reported have frequently been operated upon while the disease is still acute, but from two to ten or even more days after the beginning of symptoms. Sixty-one cases of perforation of the gallbladder in acute cholecystitis recorded by Judd and Phillips²⁴, were operated upon after the disease had been in progress an average of twenty days. The mortality rate in this series was nine and eight tenths percent. What the mortality would have been had these patients been subjected to operation within the first forty-eight hours we can but speculate. Pratt¹⁰ records forty-five cases of acute cholecystitis which were operated upon within twenty-four hours after admission to the hospital with a mortality of twenty-two and two tenths percent. duration of the acute attack in all cases is not stated. Again we can but speculate concerning the death rate if these patients had been treated after a conservative period of waiting. In discussing the deaths, Pratt states that there was an average of thirteen days delay before operation. There were no deaths when operation was performed within forty-eight hours of the initial colic. Stone and Owings⁴ report nine patients operated upon without a death from nine hours to twenty-three days after the onset of the acute attack. Since there were no deaths in this series we must assume that these patients were treated with skillful surgery and excellent judgment. In spite of such excellent results with prompt operative treatment after an average of nearly seven days between onset of the disease and operation, an optimum time for early operation is hardly established. These authors are convinced that prompt surgical attack is the method of choice in all types of acute gallbladder disease. In a series of twelve cases operated upon within forty-eight hours after the onset of

acute symptoms, Zinninger² records no deaths. After an interval of two to five days the mortality was six and six tenths percent in fifteen cases. After more than five days had elapsed before operation the mortality rate was twentyfive percent in eight cases. He recommends immediate operation in acute infections of the gallbladder if symptoms are severe and particularly if there is an associated high leucocytosis. In Graham's twenty cases operated upon within forty-eight hours there was one death (five percent) due to an associated acute pancreatitis. Heuer's mortality in thirty-five acute cases subjected to cholecystectomy was two and eight tenths percent. The duration of symptoms before operation is not recorded.

The group of surgeons who advise a general waiting policy in the treatment of acute cholecystitis are well aware that the fulminating type of acute gallbladder infection may result in gangrene or rupture and recognize the necessity of early operation in such cases. Smith¹⁸ is convinced that operations upon patients with acute gallbladder disease are unwise unless the evidence points to a free perforation. His statistics show operation upon 107 acute cases with nine and three tenths percent mortality and ninety-four cases subsided with a death rate of five and three tenths percent. After analyzing 508 operative cases with a mortality of four and seven tenths percent, Judd and Phillips 25 state that they wish to subscribe to the plan of early operation in acute cholecystic disease but feel that there are certain instances in which surgical treatment should be postponed. There is no set plan that will fit all cases. It is Lahey's14 opinion that in most cases of acute or subacute cholecystitis one may safely observe the patient for two, three or four days until a decision is made as to whether or not the inflammatory process is progressing or regressing. In the presence of increased spasm, rising temperature and rising white count, an immediate cholecystostomy should be done. E. A. Graham and his associates16 believe that it is seldom advisable to operate upon a patient with acute cholecystitis because of the danger of serious infection and development of peritonitis following operation upon an acutely inflamed gallbladder. In a discussion of the treatment of acute cholecystitis Bruggeman¹⁹ states that acute cholecystitis may be compared to acute salpingitis in that it rarely kills if treated conservatively. Flint²¹ summarizes his opinion

by stating that, "Either to operate on the acute gallbladder at once, as we do on the appendix (the cases I have treated in this way have done very well), or to leave things to settle down much longer than is the custom at present. The thing to avoid is operation during the stage when active pericholecystitis may still exist".

In a series of 283 patients with gallbladder disease treated by operation at the University of Kansas Hospital there were found 114 in which the pathologist reported some evidence of acute inflammation in the gallbladder. Operations for malignant disease are excluded. For purposes of determining mortality the 114 patients are divided into two groups. In group one are included all cases operated upon after the temperature had reached normal. Group two includes cases treated by operation while still having a temperature above normal. In this latter group the time interval between onset of the last acute attack and operation varied from three days to several weeks. In not a single case was operation done within forty-eight hours after the onset of acute pain. In addition to these two groups there were three patients, aged sixty-eight, fifty-eight, and seventy-nine, who died while being treated on the medical service with perforation and diffuse peritonitis, perforation with abscess and empyema with cholangitis. The mortality rates in the two groups are tabulated below.

TABLE I

Group 1. Operation after temperature reached normal.

89 cases 8 deaths mortality 8.9 % Group 2. Operation before temperaturereached normal.

25 cases 1 death mortality 4. %

Like many another series of cases reported in the recent literature the total number in these two groups is considered too small from which to draw any very definite conclusions. These findings were, however, somewhat surprising since it has been the general policy in this hospital to wait until acute symptoms have subsided before operation.

There is still some disagreement among surgeons concerning the choice between cholecystectomy and cholecystostomy for treatment of acute cholecystitis. The majority agree that cholecystectomy should be done when the general condition of the patient or the local

condition of the disease will permit. From a technical standpoint it is the opinion of some surgeons that cholecystectomy is less difficult in the early stages of an acute attack than it is after the infection has subsided,^{5,2,26}. Estes¹² recommends partial cholecystectomy in properly selected cases when cholecystectomy is indicated but is technically impossible or unsafe.

DISCUSSION

It is doubtful if the treatment of acute cholecystitis can be logically compared to the treatment of acute appendicitis. There is a marked difference in the natural history and the extent of the pathologic changes in the two diseases. Cholecystitis is essentially a chronic or recurrent disease associated with or causing disease in other important organs, while appendicitis is a local disease which can be entirely removed by operation before rupture. The emphasis placed upon fortifying the liver by proper treatment both before and after operation is tacit evidence that this organ is, or may become seriously involved when there is infection in the gallbladder. No such warning against acute damage to another organ is expressed when the operative treatment of acute appendicitis is considered.

One can hardly doubt the vast experience of many years observation that the great majority of attacks of acute cholecystitis will subside, permitting operation at an afebrile period after the patient has developed an immunity to his infection. On the other hand there are cases of acute infection of the gall-bladder that will rupture into the free peritoneal cavity, rupture with the formation of pericholecystic abscess, develop acute cholangitis or acute pancreatitis resulting in a very high mortality. As in appendicitis it is the complication of acute cholecystitis that is feared and not the primary disease as long as it is confined to the gallbladder.

If the surgical treatment of acute cholecystitis is to be compared to the treatment of acute appendicitis the time elapsing between the onset of acute symptoms and operation must be the same in both diseases. Walton's¹ statement that, "If an operation is carried out within the first twenty-four hours of the onset it will be as free from danger as the corresponding one performed for acute appendicitis", can hardly be accepted without reservation when the difference in the pathology of the two diseases is taken into consideration.

The frequency of gangrene, perforation

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with diffuse peritonitis and perforation with abscess is the important consideration from the standpoint of mortality and morbidity. According to Alexander¹³ the incidence of rupture or perforation of the gallbladder is about two percent of all diseases of the gallbladder and biliary tract. Heuer³ points out that to determine the true frequency of the complications of acute cholecystitis and their dangers to the individual it is necessary to analyze not the total cases of gallbladder and duct disease, but solely the cases of acute cholecystitis. From his own records and those of others Heuer estimates that at least twenty percent of the cases of acute cholecystitis are complicated by gangrene, perforation and abscess or peritonitis if a policy of inactivity toward the disease is adopted. The mortality from such complications averages about forty-six percent. Since the mortality following early operation for uncomplicated acute cholecystitis is less than three percent as determined by the reports of Zinninger², Graham⁹, and Heuer³, listed above the importance of preventing complications by early surgical intervention is at once apparent. With these published statistics in mind are we justified in concluding and ready to recommend that all cases of acute cholecystitis should be operated upon within forty-eight hours after the onset of acute symptoms or even later during the progress of the acute infection? If the figures are correct there must be eighty percent of acute cases that will be free of complication and subside if operation is postponed. Again, if the treatment of acute cholecystitis is to be compared to the treatment of acute appendicitis as a criterion for operation, we must conclude that all cases of acute cholecystitis should be treated by cholecystectomy before complications have developed and while the disease is still confined to the gallbladder.

It is quite true that the average surgeon sees very few patients with acute cholecystitis during the first two or three days of the attack. Either the patient has had several attacks of more or less severe colic from which he has recovered and is not seriously concerned about another, or the family physician has been so definitely impressed with a waiting policy in the treatment of all acute gallbladder disease that early hospitalization is not considered. This impression must be corrected before early operation could become routine.

CONCLUSIONS

It may be safely said that prompt operation

is indicated in the treatment of acute cholecystitis when there is evidence of perforation or when there is a rising temperature, pulse and leucocyte count with increasing local tenderness and muscle rigidity.

The choice between cholecystectomy and cholecystostomy must be made by the surgeon at the operating table in each individual case after carefully considering the patient's general condition and the extent of the local lesion. The operation that the surgeon believes will save the most lives is obviously the one to choose.

It is very doubtful if sufficient evidence has yet been presented to positively prove the safest time for operation upon all patients with acute cholecystitis. It seems very probable that the present mortality rate might be lowered by operation within the first two or three days after the onset of the acute attack. After several days have elapsed there is still much evidence to support a waiting policy except in those cases showing no improvement, or in which the disease is progressively growing worse.

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MATERNAL, NEONATAL AND INFANT DEATH RATES IN KANSAS; 1931-35

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Authorities have contended for many years that maternal and infant death rates for the United States were unnecessarily high. In late years the infant death rate has shown a reasonable decline, but a less marked reduction has been shown in maternal deaths. In a recent tabulation of statistics showing maternal death rates of twenty-one nations, the United States, with one exception, ranked highest in the list. Four of these nations showed a rate of less than one-half that of the United States. This constitutes a challenge to the medical profesfesion and to others especially concerned, that something be done and the situation be not regarded with the complacency of reading a weather report.

MATERNAL DEATHS IN KANSAS

In 1934 Kansas ranked twenty-seventh among the states with a maternal death rate of six per 1,000 live births. One state had a rate of three and nine-tenths, less than two-thirds that of Kansas. Kansas deserves a higher position in this scale, because of the character of her population and the opportunities and privileges of her citizens.

In Kansas, the midwife problem does not assume the importance that is found in a number of states. In the thinly populated sections of the state, the lack of medical care within a reasonable distance enters into the picture and may have a bearing on the high maternal mortality. The average annual state rate for the five years 1931-1935, was five and fourtenths per 1,000 live births.

A large lying-in hospital in the United States some years ago, attained a record of more than 2,000 consecutive births without a maternal death. It is of interest that frequently the maternity hospital receives more than its proportionate share of the serious and complicated cases, yet maintains a record far above the general average. While in general practice it is not possible to equal the record of expert service of a well equipped and manned maternity hospital, yet it seems possible to greatly improve the present record in our state. General practitioners who care for a large proportion of maternity cases in Kansas, are not all making use of the available opportunities to educate their clientele in the possibilities of adequate prenatal, natal and postnatal care, and the benefits that accrue from such service in the conservation of human life and the promotion of health and happiness.

According to the report given in the American Journal of Public Health for January, 1937, the Chicago Maternity Center in four years, from July 1, 1932 to June 30, 1936, gave some type of care during pregnancy, labor, or the puerperium, to 14,597 women in their homes. The total number of confinements, abortions and women referred to hospitals for some complication, were 12,597. These patients were from the poorest classes in the city. The total deaths among these patients from all causes numbered eighteen. Eleven of the deaths were attributed to puerperal causes. The net maternal death rate was nine-tenths per thousand live births, or one-sixth that of Kansas. It would appear that this enviable record shows a definite relationship to sound obstetric practice when applied to maternity care, even in poverty stricken environment.

MATERNAL DEATHS BY CAUSES

In reviewing the causes of maternal deaths in Kansas for 1931-35, it was found that complications following abortion ranked first, causing twenty per cent of the total number of deaths. Next in order were septicemia with nineteen per cent; puerperal alburminuria and eclampsia fourteen per cent and other toxemias of pregnancy, phlegmasia alba dolens, embolus and sudden death, eleven per cent. These four maladies were responsible for sixty-four per cent of deaths of Kansas mothers in the five years, a toll of 550 lives. There is little argument that these conditions are largely preventable and that through proper cooperation, with adequate prenatal, natal and postnatal care, at least half of these lives could have been saved.

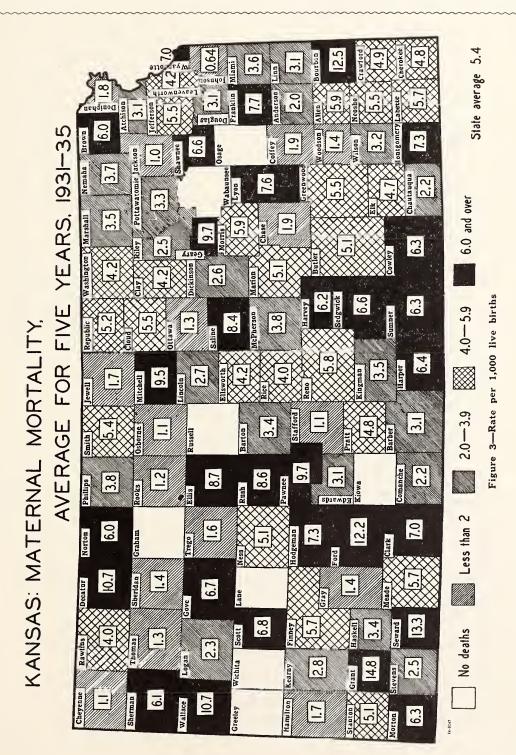
MATERNAL DEATH RATES BY COUNTIES

Maternal death rates in Kansas counties vary from none in eight counties to a rate of MAY, 1937

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fourteen and eight tenths in one county as shown in figure 1. In the highest group, those having more than six deaths per 1000 live births, there were twelve counties in the western one-third of the state and nine counties each in the central and eastern sections. The counties with the highest rates in this upper group are located in the western portion of the state, where the distance between the patient and available medical attention is greater. The

location of hospitals in certain counties accounts for higher rates than would otherwise prevail, since serious cases calling for surgical intervention are often brought to the hospital from surrounding counties, and mortalities are recorded at place of death and not at place of residence. This condition, however, does not explain high rates for all counties. Lack of prenatal care and supervision are undoubtedly responsible for many deaths. Education of

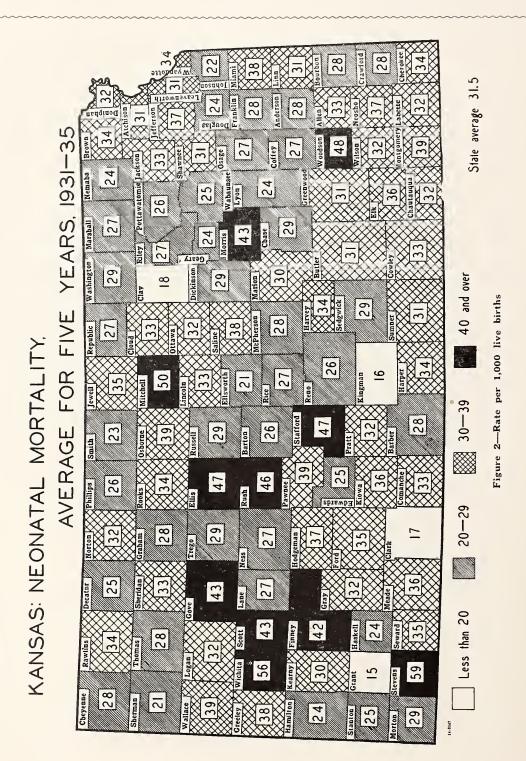


mothers as to the necessity of placing themselves in charge of a competent physician, early in pregnancy, has proven its value and is appreciated by the physician as giving him the opportunity for service. With such practices a definite reduction of the various accidents and hazards of pregnancy have been shown. Careful demonstrations and studies have shown that prenatal care reduces the death rate of mothers fifty per cent, and the death rate of babies sixty per cent below the rate of deaths without such precautions.

In the second highest group those having from four to five and nine tenths deaths per 1000 live births, nineteen of the twenty-six counties lie in the eastern half of the state.

The third (2.0-3.9) and fourth (less than two) groups are more evenly distributed.

Eight counties with 4,952 births had no maternal deaths in the five years. Six of these



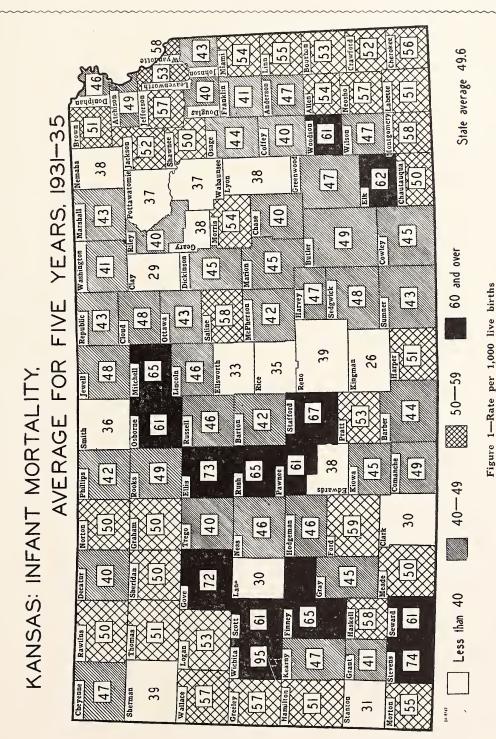
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counties are located in the western half of the state where hospital facilities may not be readily available in that county or adjoining counties.

NEONATAL DEATHS (Under One Month)

Records of neonatal deaths, as such, have been kept in Kansas since 1924. This feature of the infant death rate in our state has not shown the proportionate decline that has been shown in the total death rate for the first year of life. Sixty-three and one-half per cent of all infant deaths occur during the first month, the average annual rates being thirty-one and five tenths (neonatal) and forty-nine and six tenths (infant mortality) per 1000 live births respectively for the five years 1931-35. (Figs. 2 and 3). Injuries at birth and syphilis are important causes in neonatal fatalities. Accepted obstetrical practice today calls for a Wassermann test as a routine procedure, but it is believed such practice is not generally fol-

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lowed for several reasons, one of which is

expense to the patient.

In reducing infant deaths in Kansas in the future, most of the reduction must be made in the neonatal group. It is true that in any adequate program for the reduction of neonatal deaths, an intimate knowledge of the causes is absolutely essential. Outside of professional circles, the argument may be offered that early infant deaths are largely beyond our control and neonatal mortality is a selective process which in the long run is beneficial to the race. This same attitude was formerly held by many regarding infant mortality as a whole—the idea of "the survival of the fittest".

INFANT MORTALITY

Infant mortality, as an index of health of the general population and a guide to the health official, has been compared to the clinical thermometer as a guide to the practicing physician. Neither should be used alone without taking into consideration related factors. The fallibilities of such a guide if used alone and without a careful study to learn of all the factors that enter into the picture and the effect of these factors on the final result is apparent. The reliability and uniformity is more constant where the number used for the study is large. For this reason the five year period is used as a more reliable guide than that of a single year, particularly in the counties with a small number of births.

Where studies have been made, it was found that economic stress and a low level in living conditions contributed to a distinct rise in infant mortality rates. Economic and living conditions, therefore, are recognized as factors in infant mortality. The average annual infant mortality rate for Kansas for the five years 1931-1935 was forty-nine and six tenths for each 1,000 live births; in the registration states for 1931-1934, it was sixty and two tenths. Several states have rates below that of Kansas. For the years 1931-1934, the state of Oregon had an average rate of forty-one. It is estimated that an infant death rate of thirty per 1000 live births is possible.

INFANT DEATHS BY CAUSES

Interesting changes are found on comparing causes of infant deaths in 1914-18, with 1931-35. These data are shown in Table 1.

In the majority of communicable diseases a definite reduction is noted in the deaths of the latter period compared with the earlier.

From meningococcus meningitis, the deaths are about one-fifth; diphtheria and anterior poliomyelitis, one fourth; typhoid fever, small-pox, erysipelas and tuberculous meningitis,

TABLE 1
INFANT DEATHS BY CAUSES FOR TWO, FIVEYEAR PERIODS 1914-18 AND 1931-35

TERR TERRODO IVIT TO	111112 1991	
	COMPARATIVE OF DEA	NUMBER
CAUSE	OF DEA	THS
		1931-1935
Typhoid fever		3
Smallpox		2
Measles		64
Scarlet fever		9
Whooping cough	270	172
Diphtheria		7
Influenza	97	361
Erysipelas	46	26
Poliomyelitis		3
Encephalitis, epidemic or lethargic		3
Meningococcus meningitis		12
Other epidemic and endemic disease		2
Tetanus		8
Tuberculosis of the lungs		11
Tuberculosis of the meninges		8
Tuberculosis, all other forms	9	8
Syphilis	41	79
Gonococcus infection	1	2
Purulent infection, septicemia	15	13
Rickets		14
Meningitis, simple		13
Convulsions, cause unknown		27
Diseases of the ear, mastoiditis		2.9
Heart disease, all forms		4
		29
Bronchitis		
Broncho pneumonia	_	770
Lobar pneumonia		195
All other diseases respiratory system	n 26	34
Diarrhea and enteritis		578
Appendicitis and typhlitis	4	8
Hernia, intestinal obstruction	72	75
Spina bifida and meningocele		
(difference in classification)	647	89
Congenital malformations of the h		640
Other congenital malformations		291
Congenital debility		238
Premature birth		2388
Injury at birth		649
Other diseases of early infancy		359
All accidental causes		162
Not specified or unknown	86	126
All other causes	144	374

In this Table, the figures in the two columns are comparable. The number of deaths in the first column for the earlier period, represent deaths for the same number of births, as found in the second column.

one-half and for measles and whooping cough, two thirds that of the earlier period. Only a slight reduction is noted in the respiratory diseases, much less than in the adult for the same periods. A higher number is shown in syphilis than in the earlier period. MAY, 1937 203

TABLE 2 NUMBER OF BIRTHS; MATERNAL, INFANT AND NEONATAL DEATHS, AND RATES PER 1,000 LIVE BRITHS; 1931-35

	O LIVE		1110	. 1))			-
County	Number of Births	Number under 1 yr. Deaths Rate Number		Neonatal first month Number Deaths Rate			
State of Kansas	159,579	865	5.4	7,910	49.6	5,033	31.5
Allen	1 4 44 12 6		5.9	93	54.5	56	32.8
Anderson	1,010	2	2.0	48	47.5		27.7
Atchison	1,912 651	6 2	3.1	94	49.2 44.5	18	31.4 27.64
Barton	2,070	į 7	3.4		42.5		25.6
Bourbon	1,840	23	12.5	98	53.3		27.7
Brown	1,494 2,540	13	6.0 5.1	76 125	50.9 49.2	51 80	34.13 31.5
Chase	524	1	1.9	21	40.1	15	28.6
Chautauqua	906	2		45 142	48.7		32.0
Cherokee	2,521 887	12	4.8	42	56.3 47.35	25	33.7 28.4
Clark	574	4	7.0	17	29.6 29.1	10 22	17.2 18.3
Clay	1,201 1,655	5 12	4.2 5.5	35 80	48.3		32.6
Coffey	1,068	2	1.9	43	40.3	29	27.1
Comanche	452 3,618	23	2.2 6.3	22 164	48.7 45.3	15 118	33.2 32.6
Crawford	3,293	16	4.9	171	51.19	91	27.6
Decatur	843	9			40.3	21	24.9
Dickinson	1,948 1,114	5 2	2.6	87 51	44.7 $ 45.8 $	57	29.3 32.3
Doniphan Douglas	1,903	6	3.1	76	39.9	45	32.3
Edwards	634 639	2 3	3.1 4.7	24	37.8 62.5	16	24.9 35.9
Elk	2,747	24	8.7	202	73.5	128	46.6
Ellsworth	955	4	4.2	32	33.5	20	20.9 42.3
Finney	1,583 2,290	9 28	5.7 12.2	103 136	65.1 59.4	67 81	35.4
Franklin	1,688	13	7.7_	69	40.9	47	27.8
Geary	1,335 750	13 5	9.7	51 54	38.2 72.0	32	23.9 42.7
Gove	885	ó	0.0	44	49.7	25	28.2
Grant	271 694	4	$ 14.8 \\ 1.14 $	11 31	40.6 44.7	22	14.7 31.7
Gray	211	0	0.0	12	56.9	<u> </u>	37.9
Greenwood	1,989	11	5.5	94	47.2	61	30.7 23.9
Hamilton	586 1,516	16	1.7 10.5	30 77	51.2 50.8	14 51	33.6
Harvey	2,271		6.2	107	47.1	77	33.9
Haskell	293 409	1 3	3.4 7.3	17 19	58.0 46.4	15	23.9 36.7
Hodgeman Jackson	990	1	1.0	52 52	52.5	33	33.3
Jefferson	915 1,156	5 2	5.5 1.7	52 55	56.8 47.6	34 41	37.1 35.5
Jewell	1,564	1	.64	68	43.5		22.4
Kearny	362	1	2.76	17	46.9	11	30.4
Kingman	1,134 559	$\begin{vmatrix} 4\\0 \end{vmatrix}$	3.52 0.0	30 25	26.4 44.7	18 20	15.9 35.8
Labette	2,443	14	5.73	124	50.7	78	31.9
Lane	297 2,611	0 11	$0.0 \\ 4.21$	130	30.3 53.2	81 81	26.9 31.0
Leavenworth	735	2	2.72	34	46.2 54.9	24	32.6
Linn	964 433	3	3.11 2.3	53	54.9 53.1	30 14	31.1 32.3
Logan	2,488		7.63		37.8	61	24.5
Marion	1 7631		5.10	80	45.4	53	30.1
Marshall	1,989 1,859	9 7 7	3.51 3.76	78	43.2 41.9	53 52	26.6 27.9
Meade	521	3	5.75	26	49.9	19	36.5
Miami Mitchell	1,404	5 10	3.56		54.1 64.7	54] 53]	38.5 50.4
Montgomery	1,051 4,255	31	9.51 7.28	249	58.5	167	39.2
Morris	844 474	5	5.92 6.33		54.5 54.8		42.6 29.5
Nemaha	1,883	71	3.72	72	38.2	46	
Neosho	1,831	10	5.46	105	57.3	68	37.1 26.9
Ness	778 1,168	4 7	5.14 6.0	59	46.3 50.5	38	32.5
Osage	1,204	0	0.0	53	44.0	32	26.6
Osborne Ottawa	922 786	1 1	1.08 1.27		60.7 43.2	36	39.0 31.8
Pawnee	932	9	9.66	57	61.1	36	38.6
Phillips Pottawatomie	1,062 1,208	4 4	3.77 3.31		42.4 37.2	28 32	26.4 26.5
Pratt	1,050	51	4.76	56	53.3	341	32.4
Rawlins	740 4,471	3 26	4.5	37	50.0 38.9	25	32.8
Republic	1,151	6	5.81 5.21	50	43.4	31	32.8 25.9 26.9
Rice	1,242	5	4.03	44	35.4	33	26.6

County	Number of Births	Maternal Number Deaths Rate	Infant under 1 yr. Number Deaths Rate	Number
Riley Rooks Russell Rush Saline	1,585 843 887 932 2,511	4 2.52 1 1.19 0 0.0 8 8.58 21 8.30	41 48.6 41 46.2 61 65.4	43 27.1 29 34.4 26 29.3 43 46.1 95 37.8
Scott Sedgwick Seward Shawnee Sheridan	586 11,298 974 6,937 686	75 6.63 13 13.34 46 6.63	541 47.9 59 60.6	25 42.7 329 29.1 34 34.9 212 30.6 23 33.5
Sherman Smith Stafford Stanton Stevens	817	5 6.1	32 39.2	17 20.8
	1,105	6 5.4	40 36.2	26 23.5
	913	1 1.1	61 66.8	43 37.1
	196	1 5.1	6 30.6	5 25.5
	405	1 2.5	30 74.1	24 59.2
Sumner Thomas Trego Wabaunsee Wallace	2,186	14 6.4	94 43.0	67 38.6
	784	1 1.3	40 51.0	22 28.1
	625	1 1.6	25 40.0	18 28.8
	731	0 0.0	27 36.9	18 24.6
	279	3 10.7	16 57.3	11 39.4
Washington Wichita Woodson Wilson Wyandotte	1,434	6 4.2	59 41.1	41 28.6
	178	0 0.0	17 95.5	10 56.2
	722	1 1.4	44 60.9	35 48.5
	1,536	5 3.2	73 47.5	50 32.5
	12,412	87 7.0	726 58.5	418 33.7

One notable reduction is in diarrhea and enteritis and other diseases of the digestive system, in which deaths have been reduced more than fifty per cent. A number of factors have contributed to this reduction, among them being improvement in milk supplies, advancement in the care of foods, refrigeration, and a better understanding of approved practices in infant feeding and attention to cleanliness in infant care.

A large and well known life insurance company, through the establishment of a nursing service and conducting a program of health education among its policy holders, particularly among mothers, reduced the infant death rate in the community from 300 to 100 per 1000 live births in a period of three years.

With more universal application of present day knowledge in infant care, rates for many of these maladies may still be materially reduced and many infant lives saved.

COMPARISON OF COUNTIES IN MATERNAL, NEONATAL AND INFANT DEATH RATES

In the counties having the highest neonatal death rates, all but two are listed in the highest group for infant mortality. This shows the close relationship between neonatal and infant mortality.

In the counties grouped in the lowest rates for neonatal deaths, three of the four counties are in the corresponding group for infant mortality.

In each of the four groups, a goodly majority of counties fall into similar lists for

deaths occurring in the first month and the first

There is no similar relationship between maternal and neonatal and infant death rates. The county with the highest infant death rate in the state did not report a maternal death in the five years. In the thirty counties, in the highest rate group in maternal deaths, but five are found in the corresponding group for infant death rates.

The State Board of Health believes it is possible to materially lower the maternal, neonatal and infant mortality rates in Kansas, through methods that are now known to aid in such life conservation. The cooperation and help of individuals and organized groups is sought in carrying forward this program.

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A METHOD OF REVIEWING GROSS ANATOMY

HOMER B. LATIMER, PH.D.*

Lawrence, Kansas

Many men in practice have, of their own accord, expressed a desire to come back and review their gross anatomy, and it would be a fine thing if these men could return and review anatomy and other phases of their laboratory training, but there are real difficulties on both sides. At present the Anatomy Department has barely room and material sufficient for the regular classes, and most men feel that they cannot take the time necessary to adequately review one of these subjects. The advantages to both the department and to the men in the contacts with other workers of slightly different outlook, the advantages in the use of models, charts and other demonstration material cannot be denied and yet there should be some method whereby the progressive practitioner may review his anatomy at home.

Some years ago Jackson ('02) suggested the value of the study of cross sections as a method of reviewing gross anatomy. We have been

using sections of adult cadavers for a review in the first year following the dissection of the body and just preceding the general examination over the entire body, and also as an elective second year course. The study of cross sections gives the student a new view of the structures previously dissected and helps to emphasize the relations of these structures. Sections of adult cadavers are of course impracticable for the local practitioner but there are a large number of older fetuses which are stored and eventually discarded. This material could well be used by individual physicians for a review of gross anatomy. Some of the relations and the relative sizes of parts are different from those of the adult but the attention being paid in these days to the care of the child only makes these differences of greater value if they are kept in mind and not taken as the relations and sizes of the adult organs. We have found in our laboratory that the study of the cross sectional anatomy of an older fetus is a most excellent review of the field of gross anatomy.

The preparation of cross sections through freezing and sawing is a difficult task without special equipment. The method of decalcification described by Terry ('00), Jackson ('02) and more recently Latimer ('36) is a simple method and yields excellent results with fetal material. The method used in our laboratory is as follows: The fetus, previously hardened in ten per cent formalin, is decalcified in from five to ten per cent hydrochloric acid or nitric acid of the same strength. To adequately preserve a fetus, ten per cent formalin should be injected, either with a syringe or by gravity through the umbilical vein. It is well to inject some formalin with a hypodermic needle into the abdominal and the two pleural cavities. If the needle is introduced obliquely through the wall, the fluid will not be forced out when the needle is withdrawn. The fetus should then be immersed for a couple of weeks in several times its own bulk of a five to ten per cent formalin solution. It takes several weeks, depending upon the size of the fetus and the strength of the commercial acid used for complete decalcification. The solution should be changed every week or ten days and the progress of the decalcification can be determined by trying the jaw bone or temporal bone or other dense bone with a needle. As soon as these denser bones can be pierced by the needle

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the fetus is ready to be removed, washed and sectioned.

Use a long sharp butcher knife and to aid in getting the sections parallel we have been using a device similar to a large carpenter's miter box, with a slit cut toward one end through which the knife will slide. Three boards nailed together in a U shape will be adequate if the boards are of sufficient width to make a trough just large enough to hold the fetus. The fetus can be advanced by hand the desired width of the sections for each cut and thus a uniform series of sections can be secured. Sections may be cut almost any desired thickness, as the decalcified fetus will cut, bones and all, very much like a piece of cheese. We usually cut sections about one-half centimeter thick through the head or regions where there are many fine details and thicker in other regions. Loose pieces of intestines or other organs may be kept in place by sewing the loose pieces through their edges to adjacent structures. Sections are probably best preserved in a five to ten per cent solution of formalin. Sections which are to be handled a great deal or sections for which one has no container may be immersed, as suggested by Ransom ('24), in pure glycerine plus five per cent phenol for from one to three weeks and then drained. These sections will keep without being immersed in a fluid. They should be kept from the dust. They tend to darken somewhat with age. This method is better adapted to material used by a class where there is danger of its being left out of the fluid.

Sections of fetuses decalcified with nitric acid often show a better differentiation of the various tissues but they may be somewhat sticky to the touch and hence not so pleasant to work with. Hydrochloric acid is preferable for most adult material, although either acid may be used in the preparation of adult heads. nitric acid may macerate the material before adequately decalcifying it.

An excellent study of the ear may be made through the decalcification of the temporal bone, after which the various structures may be dissected out very readily. The relatively large size of the middle and internal ear in the late fetus and newborn makes the study of the fetal ears nearly as valuable as that of the adult. The course of the facial nerve through the temporal bone, for example, may be dissected out with a scalpel much as though it were imbedded in cartilage.

drawings or graphic reconstructions are wanted, the method is the same as in the study of sections of adult cadavers. First, make tracings with india ink on glass plates laid directly on the sections. Old photographic plates from which the film has been removed are good. Then these outline drawings are transferred to paper by placing the paper over the outlines on the glass plates and tracing them. The glass plate and the superimposed paper can be held horizontal in a frame or against a window or an x-ray view box. If one desires to make a graphic reconstruction, the outline of the fetus should be drawn from the anterior side before sectioning and later on the section levels drawn in on this sketch of the entire fetus. The dimensions of the desired organs or systems, measured from the side of the drawings of the cross sections, may then be plotted on the drawing of the anterior view of the entire fetus. Connecting these points will outline the desired structures.

This method of decalcifying and studying sections of advanced fetuses is not new but it does seem as though it should be used more frequently and that it could be used to meet the need of review by men who cannot find time to go away for the review courses. The sectioned material may be kept indefinitely and may be used whenever the physician has time to review a region or part and also it may serve to supplement his study of textbook or atlas for some particular problem at hand.

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In spite of all our advances in medical knowledge, it is still true that it is more important to know what sort of patient has a disease than what sort of disease a patient has.—James J. Walsh, M.D.

Different physicians, using the same medicines, both with the same skill and training, will get different results, because the factor of personality is so important in the healing art.

The doctor must have knowledge, skill, experience, but more important than this, his most effectual implement is the patient's confidence.

PROLAPSE OF THE UMBILICAL CORD*

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ElDorado, Kansas

Premature expulsion of the umbilical cord is a serious complication of labor. It is one of the most frequent causes of stillbirth, since death of the foetus is inevitable when pressure is exerted and maintained on the cord. Such pressure is favored when the cord is prolapsed during strong uterine contractions.

Three conditions must be fulfilled to produce cord prolapse. These have been shown to be a disproportion between the presenting part of the foetus and the pelvic inlet, a dilating or dilated cervix and rupture of the membranes.

In a series of 3,931 deliveries in the Clevelany City Hospital there were nineteen cases of prolapse of the cord, an incidence of one in 206 or forty-eight hundredths percent. DeLee reports an incidence of one to four hundred. In these nineteen cases there were eight infant deaths, a mortality of forty-two percent. The total infant mortality of the series was two and three tenths percent.

External pelvic measurements were recorded in twelve of this series, in none of these did the measurements reveal contracted pelves. In the other seven cases the patients were all multiparae, who had had no trouble in their previous labors. In none of these cases was the diagnosis made either before or after delivery of contracted pelvis. Sixteen multiparae and three primiparae comprise the series. There were fifteen occiput presentations, in six of which the head was high when the diagnosis of prolapsed cord was made. There were four breech presentations. There was a history of premature rupture of the membranes in nine cases. two of which were breech presentations. The outstanding abnormality in the series was that of a patient with polyhydramnios. patient was a colored multipara twenty-three years old whose abdomen was of tremendous Twins were suspected but an x-ray showed only one large foetus. Her membranes ruptured three hours before delivery during a rectal examination. Three hours after the membranes ruptured the cord prolapsed and a version was immediately performed. A dead baby was the result in spite of the prompt intervention.

From the standpoint of the mother prolapse of the cord does not affect the course of labor save in those instances where she is subjected to operative procedures in an effort to save the child, or where an abnormality exists, such as contracted pelvis, which predisposes to the condition.

As mentioned above, direct pressure if maintained upon the cord is dangerous for the child, resulting usually in intra-uterine death. It is obvious that head presentations compress the cord easier than other presentations, since in the latter the pelvic canal is usually not completely filled. To quote DeLee, "Compression of the cord affects the vein first, reducing the amount of blood going to the foetal heart, and causing placental congestion. As the result of the anemia, lack of stimulation of the sino-auricular node in the auricle, and the asphyxia the foetal heart slows sometimes to fifty or sixty during the contraction of the uterus and when the compression is relieved, the heart bounds up to 130 to 160 a minute. But this does not mean that the circulation has recovered, because in many instances minute hemorrhages in the lungs and even heart clot have been produced, which render extra-uterine existence impossible. If the cord hangs out of the vulva it may congeal from cold or the mother may lie on it An additional danger to the child will arise in the operations undertaken for its rescue-all of which explains the forty to fifty percent mortality in operated cases and the eighty percent in those left to nature."

Autopsies were performed upon four of the eight stillbirths in this series; only one showed evidence of intra-uterine asphyxia. The pathologist who performed the post mortem evidently had the condition in mind since he tied off the trachea before opening the thorax. In this case the lungs were not expanded, they did not float in water in toto or in pieces and small subpleural petechiae were present. None of the abdominal viscera contained air and there was a small hemorrhagic area in the right adrenal gland. These findings are in favor of intra-uterine asphyxia at that age. The other three autopsies were valueless from the standpoint of proving or disproving asphyxia because of the manner in which they were performed.

The diagnosis of prolapsed cord can readily be made by vaginal examination; occasionally the cord may even protrude from the vulva.

^{*} Presented before a staff meeting of the Cleveland City Hospital, Cleveland, Ohio, November, 1934.

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By rectal examination this condition can usually be diagnosticated if the child is alive and the cord pulsating; then this finding is associated with marked slowing of the foetal heart during a uterine contraction a positive diagnosis is established.

Seven of this series of cases were treated by internal podalic version and extraction; of these four were preceded by manual dilation of the cervix. Four of the infants were born alive, but one died shortly after delivery. The other three were stillborn. Five cases were delivered by forceps, four living, one stillborn. There were four breech extractions, two of these infants lived and two were stillborn. The other three cases were delivered spontaneously, of these one was stillborn and two lived.

The aim of treatment in prolapsed cord is relief of pressure. This may be facilitated by deep anesthesia, which materially slows uterine contractions, and conversion if possible of the existing presentation, by displacing the presenting part by a finger in the rectum and external abdominal manipulation. Reposition of a prolapsed cord has in most instances proved ineffectual. Prolapse during the first stage of labor yields the largest percentage of foetal deaths, and during this stage if a Caesarian section is not performed, some form of postural treatment should be instituted until delivery is possible. The knee-chest, Trendelenburg, or elevated Sim's positions, combined with elevation of the presenting part by a finger in the rectum if necessary, have proved to be helpful. Delivery should be completed as soon as feasible.

SIGHT BEGINS AT SIXTY-TWO

MORTON E. BROWNELL, M.D.
Wichita, Kansas
CASE REPORT

History. This patient, J. B., of Lindsborg, Kansas, first appeared at my office on February 27, 1936. He reported that he had had some sight until he was two years of age, when he had an attack of malaria. He ascribed his loss of vision to the malarial attack or to the treatment given for this disease. Eye men at that time told the family that he had congenital cataracts and between the ages of five and seven he had six operations performed in attempts to promote absorption of these cataracts. The result of these operations on the right eye was a

complete degeneration of the globe, so that, at the age of twelve, the eye had to be removed. He never has had any more than light perception in the left eye. For many years he has had marked purulent discharge from the eyes, or as he termed it "sore eyes". The family history is negative as regards eye trouble, but his son had juvenile cataracts which I removed by a series of needlings between July 11, 1935 and January 7, 1936. His daughter is now developing juvenile cataracts.

Examination of his eyes on February 27, 1936 revealed an old trachoma in the cicatrical stage in each eye. The right eye had been removed. In the left eye the cornea was clear and the anterior chamber quite deep. The iris marked degenerative pigmentary changes. The pupil was widely dilated. There was a broad surgical coloboma of the iris from eleven o'clock to one o'clock. There was a complete series of posterior synechiae extending all along the pupillary border of the iris with streaks of pigment reaching onto the capsule. The whole pupillary space was filled with a dense fibrous membrane attached as described to the iris and very firmly attached to the root of the iris throughout the extent of the coloboma. This membrane appeared taut and tense as a drumhead.

Vision. In the left eye there was light perception with fairly good projection. Tension, with the tonometer, was twenty-four mm Hg.

Diagnosis. Old trachoma. Dense membranous cataract resulting from incomplete needlings in childhood.

Because of the presence of some trachoma granules I gave the patient a solution of one percent copper sulphate in glycerine to use in the eye once daily and advised him that, if he wished, an attempt could be made to produce an opening in the membrane with some hope of sight. He was kept under monthly observation until October, 1936 when he suddenly developed an acute, non-inflammatory, anterior glaucoma. The tension at that time was forty mm Hg. With a two percent pilocarpine solution the tension was easily controlled and on January 29, 1937 the following operation was performed.

SURGICAL PROCEDURE

Under local anesthesia a broad keratome incision was made through the cornea just above the membrane. Several attempts at picking up the capsule with every kind of forceps at my command failed. The membrane was too

tough and tense to grasp. We, therefore, incised the capsule as closely to the iris border as possible on the nasal side beginning at six o'clock and cutting nearly to the root of the iris. For this incision a cataract knife was used. We then began another incision on the temporal side about a millimeter from the starting point of the first incision and attempting again to keep close to the pupillary border. This proved very difficult and it was necessary to leave a portion of the membrane on that side. With the capsule forceps it was then easy to pick up the incised portion of the membrane and with slight traction break up the adhesions at its lowermost point. This part of the membrane was then pulled out and cut off with the iris scissors at the root of the iris in the coloboma exposing a clear black pupil. Argyrol was instilled and a pad applied.

At the first dressing the following day the wound was well closed with a slight amount of ciliary injection and a clear black pupil. He was discharged on the third day to return for examination on March 1, 1937.

EXAMINATION OF EYE ON MARCH 1, 1937

The trachoma has shown no flareup. There is a moderate catarrhal conjunctivitis. The iris is slightly tremulous. The tension is eighteen mm Hg. Ophthalmoscopic examination revealed a semilunar piece of membrane on the temporal side. The media are quite clear and the fundus shows no pathology. Refraction of the eye was difficult as the patient complained that he was dazzled by the brightness of things. With a plus eleven sphere he had a vision of 10/200.

Remarks. It is impossible to estimate at this time the exact amount of sight he has or will have. The contrast between what he has had and what he now has is so great that he is dazed. He seemed unwilling to trust his sight and was afraid to use it for fear he would spoil it, and it was only after we had reassured him that he would not wear his eye out by using it that he would attempt to enjoy the blessings of sight.

The remarkable feature of this case is that in this enlightened age such an eye could have gone unoperated for so long a time.

The real purpose of a college education is to know a good idea at sight.—J. Seeley Bixler.

First influenza epidemic occurred in 1735. Other serious ones were in 1789, 1807, 1889, 1918.

TREATMENT OF NARCOLEPSY WITH BENZEDRINE SULPHATE

HENRY N. TIHEN, M.D.
Wichita, Kansas
TWO CASE REPORTS

The condition now known as narcolepsy was first described by Westphal¹ in 1877, but was given its present name by Gelineau² in 1880. However, Redlich^{3,4} in 1915 to 1925 was the first to reawaken interest in this condition and many reports have been available since 1925, a very excellent resume being given by Daniels.⁵ The condition is characterized by irresistible impulses to sleep, which because of their frequency and persistence become very troublesome, usually interfering greatly with the patient's work and normal social life. A second symptom, called cataplexy, present in many but not all of these cases, is a momentary state of muscular helplessness into which a narcoleptic patient may be thrown by emotional stress, especially upon laughing.

The etiology of narcolepsy is unknown, although possibly due to lesions affecting the region of the hypothalamus. Symptomatically it may occur secondarily to organic brain lesions, such as tumor, encephalitis, syphilis, and trauma. However, more commonly no organic etiology can be demonstrated although it has been suggested that it may be the result of previous infectious processes, especially influenza, or of previous cerebral trauma.

The treatment previously has been rather unsuccessful. Some cases have been benefitted by ephedrine. However, recently beneficial effects have been reported^{6,7} from the use of benzedrine sulphate, and the excellent effect of this drug in two cases in which all other treatment had been of no avail prompts the following case reports:

Case 1. Mr. P. H.; Single. Age twenty-one years. Farmer.

The patient without any noteworthy previous illness or accident began at fifteen years of age to have spells of unusual drowsiness, which gradually became worse causing him to fall asleep so frequently that he had to give up his school work. Cataplexy was also present, the patient having frequent spells of sudden muscular weakness, especially upon laughing. The physical findings were negative, the patient appearing very strong and robust. The laboratory findings including urine examination, blood count,

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Wassermann, skull x-ray, and basal metabolic rate, were all normal. The patient had taken considerable treatment without relief, and from the time that he was first seen in November, 1935, until July, 1936, various treatment was tried including ephedrine, pituitary extract, thyroid extract, and potassium iodide, all without any effect. On July 30, 1936, the patient was started on benzedrine sulphate by mouth with immediate benefit, the patient stating that he could tell the favorable effect after the first dose. Since then he has remained entirely normal and free of all symptoms, taking two ten mgm. tablets daily, one after the morning meal and one after the noon meal. There have been no unpleasant effects of any kind.

Case 2. Mr. J. H.; Single. Age twenty years.

This patient was first seen in January, 1933, when sixteen years of age. The previous history is negative except that one year before the onset of symptoms he received a rather hard blow on the head in boxing, resulting in some double vision for several days. Six months before admission the patient began to have an abnormal drowsiness, taking frequent naps during the day and becoming increasingly worse so that he would fall asleep whenever he became quiet. Because of this he was unable to keep up his school work and also showed an unusual irritability and stubborness. He also exhibited a marked cataplexy consisting of frequent momentary attacks of loss of muscular control, especially upon yawning or laughing. The patient was a robust, well developed boy with no abnormal physical findings. The laboratory findings including urine examination, blood count, Wassermann, skull x-ray, and basal metabolic rate were all normal. Various forms of treatment, including thyroid extract, pituitary extract, ephedrine, and a ketogenic diet were all tried without any benefit. The patient drifted along unable to do any school work or hold any position because of falling asleep so frequently. On October 5, 1936, the patient was started on benzedrine sulphate, one ten mgm. tablet after breakfast and one after the noon meal. There was immediate and practically complete relief of the symptoms, both of drowsiness and cataplexy, and the patient has been feeling quite normal since the use of this drug was begun.

CONCLUSION

Two typical cases of narcolepsy are reported which did not benefit by any other therapy and secured immediate and practically complete relief from the use of benzedrine sulphate.

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WELL WORTHY OF THE HALL OF FAME

How many people, of the countless thousands who benefit by artificial refrigeration, know that it was devised by a doctor? In the Hall of Fame in the national capitol at Washington each state is invited to place statues of its two most distinguished sons. It is of interest to know that the State of Florida has one of its representatives, a physician, Dr. John Gorrie, the discoverer of artificial refrigeration, says Southern Medicine and Surgery. The original machine by which artificial ice was first made about a hundred years ago is on exhibition at the Smithsonian Institute in Washington. It was for a long while an object of ridicule and he was unable to get funds for its commercial development. It was not until thirty years after his death that one of the first artificial ice factories in the world was built in Apalachicola, his home. As a practicing physician he had to treat many cases of fever including malaria, which made him seek a way to procure ice for the control of the fever and for the comfort of his patients. It is of especial interest to know that unselfish seeking of a therapeutic aid for his patients and not the desire to make money led him to the discover the importance of which to humanity in the economic and industrial world is just being fully appreciated. He understood the necessity for proper ventilation of the sick room and attempted air-conditioning in a crude way.

When you have your stationery printed, when you sign your name, do not precede it with "Doctor" or the abbreviation "Dr.", but use the letters "M.D.", which you have earned the right to add to your name, and which will immediately establish your proper status .--Journal of the Indiana State Medical Association.

Great hospitals with their schools are something more than blocks of buildings where patients are doctored, and students and nurses taught. I do believe in the spirit of the place.—Stephan Paget.

PRESIDENT'S PAGE

To the Members of The Kansas Medical Society:

In this, my first letter, I wish to extend greetings to every member of The Kansas Medical Society, and to express my appreciation and thanks for the honor you have extended to me in selecting me to act as your president for the coming year.

Those of us who were privileged to attend the meeting in Topeka are now back home on the job feeling refreshed and well repaid for the time spent and more determined than ever to do our best in which ever way duty may call. We missed you who did not attend and we feel you too have missed an intellectual and social treat. This is a good time to resolve and begin to make plans to attend the next annual meeting in Wichita.

Many problems will arise during the year that have a direct bearing on our professional activities, due to recent national and state legislative enactments. These problems are being studied by our various state committees and as soon as mature conclusions have been reached you will be informed through the columns of the Journal or by direct communications from our executive office.

I feel sure that our organization is beginning to take its place as a definite influence in the legislative and social affairs of the state. We should continue to strive for better health and economic conditions for the peoples of our state, and in so doing we improve our professional status. It is imperative if we wish to occupy the place which is our right that we be alert to the changing conditions which confront us, accepting those which are right and unitedly resisting those which are wrong.

J. F. Gsell, M.D., President.

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EDITORIAL

THE PRESIDENT-ELECT

The Journal desires to pay tribute to the selection of Dr. Noble E. Melencamp of Dodge City as President-Elect of The Society for the year 1937-1938 and as President for the year 1938-1939.

Dr. Melencamp has served The Society in many capacities, particularly as a Councilor and as a Vice President. His experience with the organization and his general and executive ability befit him well to accept the many responsibilities incidental to these offices.

AMERICAN FOUNDATION REPORT

thousand two hundred answered the inquiry of the American Foundation Studies In Government and the replies of these composing the selected groups are incorporated in a two-volume report recently published under the title, "American Medicine", with a sub-title, "Expert Testimony Out of Court." The subject of the inquiry is the organization of medical care in the United States. Ten thousand physicians who have been twenty years in the practice of medicine and smaller groups of more recent graduates were given the opportunity of expressing their opinions as to the necessity for radical change in the present system of medical service, and if so, in what directions. The fact that 2,200 physicians gave time and sober thought in response to the survey is an indication that many eminent medical men are doing their own thinking along medical-economic lines, and that social awareness is not uncommon in the rank and file of the medical profession.

The report should be taken as an assembly of ideas obtained from a cross section of the profession. Physicians will read it with the feeling that there is an inadequacy in our efforts to serve the public which is due in large measure to the lack of organization of our

facilities for the prevention and cure of disease. To clarify our aims and to bring into focus the social needs which the medical profession can supply requires our most careful thought. Issues have been confused and our group-thinking has been distorted. Judge Curtis Boc, Chairman of the American Foundation Studies in Government, in his foreword to this report states:

"We think that researches into the field of government are really important only in the degree in which they are accompanied by systematic and continuous education of all of us.

"Our procedure is to present problems to competent groups and then to define the problems comprehensively by assembling all the factors brought forward in the free discussion that follows. We do evaluate the ideas, but under stern challenge from our collaborators. "The effect of this technique is to broaden the base of discussion, remove it from the narrowness of personal conclusion and emotional preference, take it out of the circumscribed field of superficial controversy, of argument by slogans and catch words, and make it possible to arrive at that comprehensive definition of any given situation that should certainly precede attempts to revise it, if any."

The history of American medicine reveals a consistent growth in knowledge, technique and organization. While in the report under examination we find many who advocate radical and complete change in the organization of our medical service, there is a more general view expressed for a continuation of the evolutionary processes which have been going on. There is a wide agreement that the best service, first of all, is to be attained through improvement in the quality of medical care and in the personnel of the profession.

For any change in the manner of distribution of medical service it is necessary to have the approval and cooperation of the medical profession. In studying this report it becomes evident that a change is coming and that the minds

of American physicians are being prepared for its acceptance. The report will be given wide public circulation. A movement such as change in the methods of distribution of medical service must first become recognized as a social necessity.

It should be understood that the reorganization which may be required of the medical profession is no reform movement. It is an effort of the National Government to apply new methods in meeting the social and economic changes out of which has arisen an industrial crisis.—R.B.S.

THE ANNUAL SESSION

It is our belief that the Seventy-eighth Annual Session of The Society was a successful meeting.

The scientific program included a considerable number of the best known physicians in the country and their presentations were well given and well received. Many favorable comments were given to the sectional plan of the program.

The registration total of nine-hundred and nine was gratifying, not only by reason it displays excellent interest in Kansas organized medicine but also as it substantially exceeds all past records.

The thirty technical and the thirty-one scientific exhibits were well patronized. All technical exhibitors expressed appreciation to the members of The Society for their interest and courtesy in this regard.

The Annual Banquet was attended by approximately five-hundred members, wives and guests. The program seemingly was enjoyed by everyone.

The innovation of alumni banquets is apparently worthy of repetition. Undoubtedly these events contributed to the record breaking registration of the first day.

Both sessions of the House of Delegates were well attended and several announcements of interest were made. New officers elected were as follows: N. E. Melencamp, M.D., Dodge

City, President; George W. Davis, M.D., Ottawa, First Vice President; W. E. Janes, M.D., Eureka, Second Vice President; Geo. M. Gray, M.D., Kansas City, Treasurer; H. L. Chambers, M.D., Lawrence, Secretary; H. L. Snyder, M.D., Winfield, American Medical Association Delegate for 1936-1937; J. F. Hassig, M.D., Kansas City, American Medical Association Delegate for 1937-1938; L. D. Johnson, M.D., Chanute, Councilor for the Third District; W. P. Callahan, M.D., Wichita, Councilor for the Sixth District: C. D. Blake, M.D., Hays, Councilor for the Tenth District; George O. Speirs, M.D., Spearville, Councilor for the Twelfth District: C. C. Stillman, M.D., Morganville, Medical Defense Board; and Lucius E. Eckles, M.D., Topeka, Editorial Board.

To Dr. John L. Lattimore as General Chairman and the committees which assisted him goes much credit for successful management of the meeting.

DR. EARLE G. BROWN

All Kansas physicians were sorry to learn of the resignation of Dr. Earle G. Brown, Secretary of the Kansas State Board of Health. He will take over the duties of Director of Public Health of Arlington County, Virginia. Dr. Brown has been health officer of Kansas for the past twelve years and during that time he has perfected one of the most efficient public health organizations of any state. He has cooperated fully with the Kansas medical profession in all of its activities and it can be said with assurance that Kansas medicine has no finer friend. He is a Past President of The Society, former Editor of The Journal, and has served The Society in many other official capacities.

Kansas congratulates Arlington County, Virginia, upon its good fortune in securing one of the best health officers in the country. It dislikes much losing Dr. Brown, but it is happy to see him advance in the profession.

We wish him all the success we feel he should and will have.

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CAUSE OR EFFECT—WHICH ARE YOU TREATING?

Mrs. Doe has seated herself opposite another physician—her fifth in as many weeks. She is listless and not a little despondent. A cloud of boredom and hopelessness seems to envelop her. Will this doctor, as the others, merely glance at her, after taking a sketchy history of her complaint, and reach for a prescription pad or a bottle of tablets?

Her cough, which began a year ago, has become progressively worse despite faithful adherence to medical instructions, directions, and advice. She has taken pills of all colors and sizes and a formidable array of liquids, effervescent salts, capsules, and powders; still she has that annoying symptom—a persistent, dry, and evidently inconquerable cough. If only this particular doctor would examine her, that, at least would be a source of gratification! The last medical man hinted that she had a "touch of T.B.", yet no x-ray of her chest had been taken, no repeated sputum examinations made, nor intradermal tests performed. She had begun to worry, to lie awake at night wondering if anyone was interested enough in her case to discover the cause of her ailment. She had money to pay for this service. Why had she so grossly been neglected?

Dr. J. broke in upon her meditations and began to ask her questions. "Yes, doctor, I have indigestion (but who wouldn't have with a stomach kept filled to overflowing with medicines of all descriptions, tastes, and odors?). I do not feel feverish in the afternoon. Yes, I have lost weight in the past year", etc.

After a thorough, painstaking examination Dr. J. arrived at a tentative diagnosis. He explained to Mrs. Doe that further observation was necessary. A basal metabolic reading should be made and an x-ray of her chest was requested. Mrs. Doe then left the office, with hope for relief kindled once more. At least she had found a doctor who did not treat her on just sight and who was concerned enough to give her time and consideration. She was pleased indeed.

The various procedures, essential for arriving at a diagnosis, having been undertaken and finished, Mrs. Doe was prepared and successfully treated for a sub-sternal goiter which was found to be the exciting cause of her apparently incurable condition—manifested only by a stubborn cough.

How often are we prone to commit the error of omission! A patient has hemorrhoids, therefore suppositories, injection therapy or surgery are in order—when, in a number of cases, (sufficient to be alarming), digital examination of the anus and rectum would disclose the existing pathology—that of cancer, ninety per cent of which are within reach of the examining finger! A careful proctoscopic or sigmoidoscopic examination will often reveal the cause of hemorrhoids, which has been attributed to disturbed physiology or constipation. A barium enema will complete the diagnostic picture. There is time, in abundance, to treat a patient symptomatically after the possibility of organic disease has been eliminated to the satisfaction of both physician and patient!

At some unguarded moment in one's practice there comes an overpowering temptation to arrive at snap or hasty diagnoses. Thus a child with abdominal pain, a high leukocyte count and an elevated temperature is rushed to the operating room and a perfectly normal appendix is removed. The child very promptly succumbs to pneumonia which could readily have been discovered had a stethoscope been placed on the chest. Cases of coronary disease, in elderly people, with pain referred to the epigastrium, have been similarly treated, not, because of ignorance, but rather because of failure to acknowledge the patient's right to live, which elemental claim more than justifies the expenditure of our best efforts when assuming responsibilities of such magnitude.

Recently, an old gentleman came under a physician's care, giving a history of having had "stomach trouble" for ten years. He had been treated for hyperacidity, gastritis, and ulcers without results. Never had a fractional an-

alysis of the gastric contents been made or a barium meal administered. The huge, malignant mass, which was so obvious on the x-ray film, was mute condemnation of attempts to treat symptoms in preference to cause.

Another, a woman aged forty-two presented herself as a diagnostic problem. When questioned concerning her complaint, she replied rather sardonically that she had had her uterus, gall bladder, appendix, and tubes removed (in that order) "without one iota of relief" from the pain she was suffering. Her abdomen, criss-crossed with scars, resembled the Chinese alphabet. The intractable pain which stabbed her back and lower extremities was found to be due to an extra-medullary benign tumor of the spinal cord, at the level of the second lumbar vertebra, which was diagnosed following the lipiodal injection of the sub-dural space and subsequent radiography.

From these actual cases, cited at random, it would appear very much worth while to exercise patience, care, and diligence in the pursuit of disease, tracing it to its source, whenever possible, using modern laboratory facilities as a valuable adjunct to diagnosis, but, above all else, trusting in the five senses with which we are endowed, training them, through daily use, to apprehend the cause that lurks behind every symptom of which our patients complain.—Paul E. Craig, M.D.

TUBERCULOSIS ABSTRACTS

A review for physicians prepared monthly by the National Tuberculosis Association and published through the co-operation of the Kansas Tuberculosis and Health Association and The Kansas Medical Society.

THE EARLY DIAGNOSIS CAMPAIGN

For ten consecutive years the tuberculosis associations of the United States have been conducting in the month of April an annual publicity campaign for the early diagnosis of tuberculosis. Dr. Edward L. Trudeau, the pioneer of the fight against tuberculosis in the United States, went on record at the first meeting of the National Tuberculosis Association on May 18, 1905, as follows:

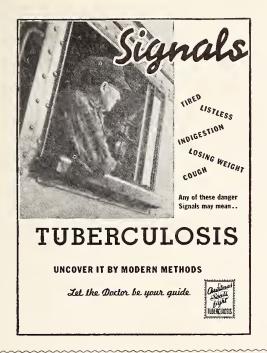


"The first and greatest need in the prevention of tuberculosis is education; education of the people, and through them education of the state. It is evident that if every man and woman in the United States were familiar with the main facts relating to the manner in which tuberculosis is communicated and the simple measures necessary for their protection, not only might we reasonably expect as a direct result of this knowledge a great diminution in the death rate of the disease, but the people would soon demand and easily obtain effective legislation for its prevention and control.

"When a state has once become well edu-



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cated, and not before, will the other requisites necessary to the control of the disease be forthcoming."

This fundamental principle is as valid today as it was thirty-two years ago. The tuberculosis associations of the country appreciate the cooperation and leadership which the medical profession has always offered. Again the farsighted physician is urged to lend his help to this year's campaign.

The theme of the 1937 E. D. C. (Early Diagnosis Campaign) is "Uncover Tuberculosis with Modern Methods." For the campaign three leaflets have been produced.

The first leaflet called "Signals" deals with early symptoms of tuberculosis and the importance of consulting the doctor on their first appearance. It is a discouraging fact that in the last ten years no appreciable increase has occurred in the proportion of "early cases" admitted to sanatoria. This is in spite of years of earnest educational efforts urging people to obtain medical advice on the appearance of the







earliest symptoms which are enumerated in the pamphlet. One of the explanations offered is that some of the early symptoms are not sufficiently severe to prompt people to action. In fact they are often so subtle as to be overlooked even by the doctor. Surveys of large numbers of sanatorium patients have shown that fatigue is often the first and only warning signal. Another danger sign which is just as often overlooked or disregarded by the patient is a group of symptoms which we commonly call indigestion. A cough that hangs on, loss of weight, blood spitting, pleuritic pain, are more likely to cause a man or woman to visit the family doctor. The physician's greatest part in the fight against tuberculosis is his willingness to investigate these danger signs at once, bearing in mind that often it is impossible to exclude tuberculosis without an x-ray of the chest. The files of tuberculosis sanatoria are filled with case histories showing that cases were diagnosed far too late. Not only is syphilis, as Osler says, a great imitator but tuberculosis also imitates the symptoms of many other diseases.

The somewhat out-dated survey by Dr. Linsly Williams and Miss Alice Hill has furnished data relating to the fate of about 1,500 tuberculosis sanatorium patients. A regretably large number of these cases were first diagnosed as bronchitis, pleurisy, colds, "congestion" of the lung and a great variety of other diseases including malaria, cancer, anemia, pathological conditions of the liver, kidney, bladder and even rheumatism.

Only the four classic symptoms of early tuberculosis—fatigue, loss of weight, cough and indigestion, are mentioned in the pamphlet. Care is taken to make clear that none of these symptoms is pathognomonic but that any one of them should be considered as a danger signal to be investigated by the physician, emphasizing the advice that he be consulted early.

The second booklet "It Can Happen" deals with the tuberculin test and is addressed to high school groups.

The third booklet "In Every Home" deals with the age-old story of contacts.

It is abundantly recognized that the reason for failure to find early cases cannot result entirely from the apathy of patients nor from lack of vigilance on the part of the doctor. Sanatorium men recognize the fact that more and more cases appear where the transition from the "early" or "silent" stage of tubercu-

losis to the moderately advanced or far advanced is relatively swift and only by the barest chance is the minimal case detected if the fluoroscope or the x-ray is not used as a standard aid in diagnostic practice.

MEDICAL ECONOMICS

Edited by O. W. Davidson, M.D. of the Medical Economics Committee

BASIC SENSE

THE LAW

The Basic Science Bill has become a law in Kansas.

The bill, as originally presented, contained provisions that would have required all representatives of the healing arts affected by it to prove themselves qualified in five basic subjects which are taught in all of their schools.

The public was then to have been served by representatives of not one or two but three branches of the healing arts, all better qualified to render health services.

As amended however, the law exempts osteopaths, chiropractors, and all other practitioners who are now regulated by their state boards of examiners.

The legislative battle failed to develop a means by which the public can measure training qualifications of some schools; yet the battle was not in vain. Several other branches of the healing arts do not have state boards of examiners, therefore their representatives, who meet the requirements of this law may gracefully present themselves to the public with their qualifications.

OSBORNE COUNTY INDIGENT PROBLEMS ANDREW P. BROWN, M.D. Osborne, Kansas

For generations the physician cloaked in knowledge and understanding has stood as a leading exponent of charity.

The past decade with its world wide economic upheaval has compelled those engaged in the practice of medicine, by force of self preservation to give consideration to medical economics.

The past decade, ushered in by a collapse of our economic and financial structure, accompanied by industrial stagnation, intensified by drouth, exhaustion of the normal products of agriculture, have supplied a class of people—the indigent, requiring provision of the necessities of life by their fellow man.

Private charity, exhausted by the magnitude of the problem, has today been supplanted by new agencies, heretofore unknown, which are daily progressing in solving such problems as food, clothing and shelter.

Unfortunately today medical care and health measures remain an unsolved problem, both for the people and those in a position to render this care.

That civilized America can ever hope to provide any measure of social security and to go forward as a superior race of people, neglecting that vital spark, the health of the individual, is to build our temples on shifting sands.

We of the medical profession recognize that, although many of the deficiency diseases are preventable, among the indigent class of people we are making little progress. Daily children are being born of mothers whose families are so large as to be dependent on public funds, and far too often with little chance of ever being otherwise. Although preventive medicine is daily making great strides, prevention of small pox, whooping cough, and scarlet fever are in no way financially available to this indigent group.

The deficiency diseases, prevalent because of insufficient budgets, produce a race of inferior people. The large families will result in a group untrained and uneducated. Surely it is possible, the day will come when disease shall spread from this great breeding ground, slowly developing.

To speak of socialized medicine among a group of medical men is to produce a wave of hysteria. To the laity it is cloaked in a vagueness which produces satisfaction in being removed from further burden of medical and hospital bills, mixed with horror at any thought of increased taxation. Yet, proper medical care of the indigent and semi-indigent remains a problem to all concerned with the welfare of his family and community of fellow men. To the medical profession it is a challenge. The doctor may look forward to producing a true solution or accept questionable substitutes.

Osborne County is a typical agricultural county of Kansas with a population slightly exceeding 11,000. At present 12 physicians are practicing in the five towns situated within

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its borders. In the past three years, agriculture, through the dust storms and drouth has seen the graineries empty, the pastures brown, and livestock sold because of lack of feed and water. Business steadily declined. Officers of various government agencies sprang up overnight in the county seat, bearing government alphabetical labels. Administrative personnel of relief agencies soon paralleled regular county officers. Yet, with it all, not one single agency, or one individual, was designated to help relieve the increasing problem of medical care for the indigent.

The acuteness of this problem is best exemplified by official figures compiled at the government relief office. During the past three years over 1,400 cases were "on relief." average size of a family is computed at four and six tenths. Clearly, over a three year period, 6,440 of Osborne County's 11,000 people were dependent upon government relief agencies. It must be understood that at no one time were the entire 1,400 cases considered active. The status of some families from the standpoint of government relief agency has been changed. But as has been proven in this county, with the exception of a few instances, the economic status of any person who has in the past three years been classified as indigent, has not improved sufficiently that if a medical problem of any magnitude arises, they are financially dependent in this respect.

For this reason the Doctors of Osborne County, through their County Society, aided by Dr. F. L. Loveland and Executive Secretary Clarence G. Munns, entered into the following agreement, in August, 1935, with Osborne County Commissioners, to provide medical care for the indigent.

(The next issue will carry an outline of the agreement.)

MEDICAL LEADERSHIP

Sir William Osler, one of the world's greatest medical writers, is credited with fanning into flame the spark that many a man did not realize was in him. This physician developed his latent ability and became a medical leader, heard throughout the world.

Many a doctor of medicine of the present day has latent abilities; these men need only the application of a "fan" to make them interesting and aggressive leaders. The time has arrived when the medical men of America must assert themselves and acquaint the people with the true facts of their profession. The public is learning much about medical practice and the profession but the plurality of information is of a biased and shaded nature which tells only half-truths not complimentary to medical men and women. The altruism of our professional people deserves a better vote of thanks than that!

Magazines and newspapers of national scope are publishing articles weekly and monthly which are giving our lay readers distorted and false impressions of medical subjects and activities. Perhaps these are inspired by our opponents who are ever on the alert; constantly contacting lay groups, giving only part of the story on such matters as socialized medicine, medical service to all groups especially those in the subsistence level and those employed with modest incomes.

If the public develops an antagonistic view-point toward the medical profession, it can hardly be blamed because it is hearing but one side of an important question. The medical viewpoint is not heard, mainly because the physician himself, who is the only one qualified to tell the story, is too modest to "toot his own horn."

Hiding our light under a bushel is to no avail and contrary to modern trends. You medical men and women are or should be leaders in your communities. Like Dr. Osler, you must encourage the spark of medical leadership and bring the message of medicine to your public—to service clubs, women's organizations, Parent-Teacher organizations, etc. Doctor, arrange to speak to these groups on subjects pertaining to medicine; for example, know the facts and spread your knowledge concerning the perils of any socialized medicine scheme in America. Many of you will say that you cannot talk in public. Neither can I, but I do.

Carry the torch in behalf of good medical service which tolerates no deterioration. No one else will do it for you. Let us have a thousand Osler's in this state, fifty thousand in the nation. You must be heard across the land. Medical leaders, assert yourselves NOW!

—Henry E. Perry, President of the Michigan State Medical Society.

When one has to maintain an argument, he will be listened to more willingly if he is known to be unbiased, and to express his natural sentiments—Sir Charles Bell.

OFFICIAL PROCEEDINGS

HOUSE OF DELEGATES

The House of Delegates met in regular session at 8:00 p. m. on May 4, 1937, at the Hotel Jayhawk in Topeka, Kansas. Dr. H. L. Snyder, President, served as presiding officer.

Dr. W. M. Mills, Chairman, presented the following report on behalf of the Editorial Board:

TO THE HOUSE OF DELEGATES:

The Editorial Board desires to submit the following report relating to The Journal for the period from May 1, 1936 to May 1, 1937.

A financial statement reflecting all income and expense to and including the April issue shows the following condition:

I. INCOME FOR THE YEAR	
Advertising\$4,	360.21
Subscriptions	51.00
Miscellaneous	1.20
Total \$4,	412.41 \$4,412.41
II. EXPENSE FOR THE YEAR	
Printing \$3,	231.05
Engraving	224.52
Salary	684.00
Miscellaneous (mailing, etc.)	122.74
Total \$4,	262.31 \$4,262.31
PROFIT	\$150.10
III. CASH ON HAND AND GOO COUNTS RECEIVABLE	
30, 1937	\$1.157.93
Slow Accounts Receivable	

The net profit of \$150.10 shown for the year 1936-37 may be compared with the profit of \$634.26 reported for 1935-36. The sizeable reduction therein has of course been occasioned by the fact that The Journal has been entirely self-supporting during the past year through its payment of fifty-seven dollars (\$57.00) per month of the salary of the Journal assistant in the central office, and which amount was approved by the officers of The Society as the proportionate time devoted to the publication by the central office. In addition to this several increased costs such as improvement of paper stock and greater circulation have been assumed. It is our opinion that the financial condition of The Journal is satisfactory and that it will be amply able to continue on its present basis of financing.

TOTAL AVAILABLE SURPLUS...... \$1,204.18

The Journal has continued its policy of purchasing all engravings used and thus no author has been put to expense in this connection.

On January 1, 1937, The Journal announced an increase in advertising rates effective immediately for new advertisers and effective on January 1, 1938, for former advertisers.

The increases are as follows:

Space	Former Rate	New Rate
One page	\$25.00	\$28.00
Half page	\$15.00	\$17.00
Quarter page	\$11.00	\$13.00
Eighth page	\$ 8.00	\$10.00

This we felt was justifiable by reason of increased expenses of publication and as it also places The Journal in line with the rates charged by publications of equal circulation in other states.

The new rates will obviously increase income and if we are successful in increasing advertising it is probable. The Journal may be able to add several additional pages and several new features within the near future.

Pursuant to the authority granted by the Council, the Editorial Board appointed Dr. Lucius Eckles as the fifth member of that board for the term of May 1936, to May 1937.

The Journal is being supplied at cost price to students of the University of Kansas School of Medicine.

All books received for review purposes are contributed to Stormont Medical Library.

Foremost problem of the Editorial Board is the acquisition of a sufficient amount of scientific material. The present policy of featuring original Kansas material in preference to articles presented at annual sessions requires a substantial amount of contributions, and we shall therefore welcome any assistance members of The Society can give in this direction.

It is still our desire that The Journal constantly be improved and that it shall completely represent the interests of all members. We shall be extremely grateful for your criticisms and suggestions toward that end.

Respectfully submitted,

W. M. MILLS, M.D., Chairman,
Editorial Board
The Journal of The
Kansas Medical Society

Dr. J. D. Colt moved that the report of the Editorial Board be accepted and incorporated into the official minutes. Seconded by Dr. Henry N. Tihen and carried.

Minutes of the last meeting were approved as printed in The Journal.

Dr. O. P. Davis, Chairman of the Medical Defense Board presented the following report: TO THE HOUSE OF DELEGATES:

Your Medical Defense Board submits herewith a report of its activities during the past fiscal year. Also, the report of our attorneys, showing present status of cases now under our charge. We recommend that only the report of the Board be published, and that the attorneys' report be placed on file with the Executive Secretary for reference by those concerned, thus sparing our defendant members a certain amount of unwelcome publicity.

It may be interesting to know that in the last twelve years, when our present attorneys began to work for us, one hundred eighteen cases have come under our attention, and of these eighty-three have been disposed of in favor of the defendants. Twenty-two cases have been settled by insurance carriers, and in only four cases have verdicts been returned against defendants.

There are at this time nine cases pending, of which final disposition has not been made. Of these nine

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cases one has been determined in favor of the defendant in the trial court and is now pending on appeal to the Supreme Court.

During the fiscal year covered by this report, only four new cases were filed, which is the fewest number of cases filed in any one year in the past twelve, except in the year ending April 1, 1935, in which there were also but four new cases filed. As a matter of comparison we note that there were eleven new cases filed in the year ending April 1, 1936. However, we do not have any way of accounting on the small number of cases filed last year.

We desire to commend the excellent co-operation we have had with our attorneys and with our defendant and other members wherever our work has taken us. Ours is a co-operative movement, and we best help ourselves by helping each other. Our defense movement has grown rather by the fewer number of cases we have had to defend rather than the larger number. This is our goal. If, at the end of some year we should find that we had gone through that year without a single new case on our files, we should feel that we were near the attainment of the desired end of our efforts.

For many years past we have given in tabular form, for each of the successive years of our operation, the total amount expended for defense. Thus the members were able to see at a glance the cost of defense, year by year, as well as the average cost per year for all the years so tabulated. We have decided to omit this feature from our annual report, beginning with this year. As this Board does not receive or expend any money, and under our new Constitution and By-Laws does not any longer have supervision over what has long been called a "Defense Fund", the checks and deposits being handled wholly by the Treasurer, President and Secretaries, there seems no longer any need for this Board to make any accounting to the House of Delegates of those funds over which it has neither knowledge or information.

This Board therefore recommends that new blank checks be printed providing for the signatures of only the officers above mentioned and omitting place for the signature of the Chairman of the Medical Defense Board.

With appreciation of this Board to the members who have been concerned and to all officers and members who have given their support and advice, this report is respectfully submitted.

O. P. Davis, M.D., Chairman C. C. Stillman, M.D. L. S. Nelson, M.D.

The report was accepted and placed on file at the suggestion of the President. Dr. Davis was also given a rising vote of thanks.

Dr. H. L. Chambers, Secretary, read his report from The Journal and it was moved by Dr. Geo. M. Gray, and seconded by Dr. L. F. Barney, that this report be accepted and placed on file. The motion carried.

Dr. Geo. M. Gray, Treasurer, presented the following report:

TO THE HOUSE OF DELEGATES:

On May 1st, 1936 your Society had in my hands as treasurer \$19,445.28, which includes both General and Defense Funds. This year I am making no effort to divide the two funds, as I understand that the new provisions of the Constitution are that it is to be carried in one fund.

During the year from May 1, 1936 to May 1, 1937 the income totaled \$13,967.35. During this period the following amounts were expended: General Fund, \$10,894.80; Defense Fund, \$9,089.41; vouchers for which expenditures are hereto attached. This leaves a balance in my hands as of May 1, 1937 of \$21,-690.69, including \$7,500.00 in Postal Savings Bonds.

The Journal account which is kept in the Central National Bank at Topeka, shows a balance according to the bank's statement as of April 29 of \$923.18. These funds are handled through the Executive Secretary in the publication and operation of the Journal. All deposits are made by the Executive Secretary and all checks against this fund are paid by voucher, signed by the President and Secretary and myself. Vouchers returned for the year run from No. 33 to No. 73 and check with my records. A list of these vouchers is hereto attached. Last year's balance was \$762.27 which shows an increase this year of \$160.91. During the past year the salary of Peggy Strawn amounting to \$95.00, was divided and a portion amounting to \$57.00 has been paid from the Journal Fund and the balance from the General Fund. Previously her full salary had been paid from the General Fund but as she devoted part of her time to Journal affairs, it was decided that this account should pay a part of her salary. Had this arrangement not been made, the Journal account would show a better profit, an additional amount of twelve times \$57.00, or \$684.00.

01 \$007.00.	
TREASURER'S REPORT,	1937
STANDING OF FUNDS May 1, 1936:	
Defense Fund	5.2
General Fund 10,691.2	
Journal Fund 762.2	27
Total	e20 207 55
Total CREDITS:	\$20,207,33
Dues from Secretary \$13,967.2	35
T . 1	
Total	
Expended for year ending May 1st, 1937	
General Fund	30
Defense Fund (actual expen-	4.1
ditures) 1,589.4	† 1
Converted to Savings	20
Bonds 7,500.0	
Total Defense Fund 9,089.4	1 1
T-t-1dituma	— \$10.094.21
Total expendituresBalance on Hand in General and Defen	
Funds	
1 41143	\$1.,100.00

Total Amount on hand \$22,613.87 Respectfully submitted, Geo. M. Gray, M.D.

Defense Reserve Fund (Postal Savings

Bonds)

Journal Balance

Treasurer.

7,500.00

923.18

It was moved and seconded that Dr. Gray be given a rising vote of thanks for his report and that it be accepted and placed on file.

Mr. Clarence G. Munns, Executive Secretary, presented the annual report on behalf of the central office. A motion was made by Dr. Marion Trueheart seconded by Dr. J. L. Lattimore and carried that the report be accepted and placed on file.

Dr. F. C. Taggart moved that the reports of the Councilors be accepted as printed in The Journal. Seconded and carried.

Dr. A. C. Armitage, Councilor of the Eleventh district, presented an oral report on behalf of his district. He stated that full support of every organized county medical society in his area was received during the legislature, and that all counties but one are organized. He also expressed the hope that his district will be one hundred per cent organized at the next meeting.

Reports of the various Society committees were accepted by title and placed on file.

Adjournment followed.

The House of Delegates met in regular session at 8:00 a. m. on May 6, 1937, at the Hotel Jayhawk in Topeka, Kansas. Dr. H. L. Snyder, President served as presiding officer.

Dr. C. C. Nesselrode, Chairman of the Cancer. Control Committee, presented the following report on behalf of that committee: TO THE HOUSE OF DELEGATES:

In presenting this report, we would like, first, to review briefly the work of the Committee for especially

the past two years.

In 1935-36, the Council very generously approved the expenditure of seven hundred fifty dollars (\$750.-00) to defray the expenses of a series of programs conducted in six different centers on the six succeeding days of one week. This experiment, as previously reported, cost approximately the seven hundred fifty dollars appropriated and we were able to present a program to approximately three hundred doctors and to conduct six public meetings at which some three thousand lay people were addressed.

In the year that is now being concluded, 1936-37, this same program was repeated at a cost slightly less than four hundred dollars. The meetings this year were even better attended. This year our public meetings were in the afternoons and our professional meetings at night and we addressed nearly twice the number of lay people. In addition to this work during this year, there has been held, as nearly as we are able to estimate, approximately one hundred fifty public meetings, each addressed by one or more members of the State Society. And there has been conducted, by the American Society for the Control of Cancer, the organization of the American Women's Field Army. There have been enrolled in that army approximately three thousand Kansas women.

It is our feeling that the lay educational program is well on its way; that there has been enough interest created, especially among women, that the matter of lay education will be carried forward. We feel that this committee should do all that it can to encourage this lay educational work and should co-operate in every way possible with the various lay organizations that are now

interested in the furtherance of this project. The members of the Cancer Committee of this Society have been encouraged to believe that this work meets with your approval and we are sure that much good has been accomplished.

Now, a look at the future. It is our belief that up to the present our efforts have been more or less sporadic and a bit disorderly. We are wanting to make to this

body some definite recommendations.

It is our belief that there is no more important work that the State Society can undertake than that of lay education but as far as the cancer program goes there must go hand in hand professional education. Lay education has received such an impetus that it is sure to be continued. If the profession meets this opportunity and meets its obligation, there must be conducted also a more intensive professional educational program.

We are, therefore, suggesting the organization of a Speakers Bureau, and to be operated efficiently, there must be a central office. We are suggesting that this central office be a part of our central office under the direction of our Executive Secretary; that this Speakers Bureau should consist of members who will address Classification Clubs, Women's Clubs and any other public meeting desiring such addresses; that all of these addresses must be under the direction of and arranged for through the central office.

Secondly, we are recommending a more intensive professional educational effort. This would be provided for through Society programs, both didactic and clinical, and further provided for by the publication of articles to be first published in the State Journal and secondly to be published in the form of a hand book which will be put into the hands of each and every member of the Society. Other State Committees which have undertaken such work have published their hand book in two or three sections, a section on each succeeding year.

In concluding this report, we are asking from the House of Delegates three specific things. First, an approval of a continuation of the Cancer Control Program. Second, an enlargement and extension of that program under the direction of a central office; all programs, both professional and lay, to be provided by the Cancer Committee through the Central Speakers Bureau. Third, that the Committee be authorized to finance this work subject to the approval of either the Executive Committee of the State Society or the Council of the State Society. It is the thought of the Committee that an aid to such financing may be obtained from some outside source; either an endowment fund or Social Security money obtained through the Department of Public Health; the details of this financing to be worked out by the Committee but, before being put into operation, to be approved by either the Council or the Executive Committee of the Council of the Kansas Medical Society.

> Respectfully submitted, C. C. Nesselrode, M.D., Chairman J. L. Lattimore, M.D. N. E. Melencamp, M.D. M. Trueheart, M.D. F. R. Croson, M.D.

It was moved by Dr. W. M. Mills and seconded by Dr. F. L. Loveland that the report be accepted and that the recommendations contained therein be approved and carried out, with amendment that the Executive Committee be designated to approve all regulations.

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The motion was carried.

Clarence G. Munns presented to The Society on behalf of Dr. J. A. Milligan, two historical documents of early Society legislative activity in Kansas. These were the first basic science bill and the original bill on the tuberculosis sanatorium. Dr. C. H. Ewing moved that the documents be accepted with appreciation and that a resolution to that effect be sent to Dr. Milligan for his fine work in carrying on for the medical profession through the years. The motion was seconded by Dr. Geo. W. Davis and carried.

The next order of business was the annual election of officers. Thereunder Dr. N. E. Melencamp was elected as President for a term of one year commencing at the close of the 1938 session; Dr. Geo. W. Davis was elected as first Vice-president and Dr. W. E. Janes as second Vice-president for terms of one year each commencing at the close of the 1937 annual session; and Dr. Geo. M. Gray was reelected as Treasurer for a term of one year commencing at the close of the 1937 annual session. No election was necessary for the office of Secretary inasmuch as the present term of Dr. H. L. Chambers does not expire until the annual session of 1938.

The following Councilors were elected by caucus of their individual districts for terms of three years each: Dr. L. D. Johnson, Chanute; Dr. W. P. Callahan, Wichita; Dr. G. O. Speirs, Spearville; and Dr. C. D. Blake, Hays.

The personnel of the Council for the year May, 1937 to May, 1938 was therefore re-

ported as follows:

First District-R. T. Nichols, M.D., Hia-

watha, term expires 1939.

Second District—L. F. Barney, M.D., Kansas City, term expires 1939.

Third District—L. D. Johnson, M.D.,

Chanute, term expires 1940.

Fourth District-J. L. Lattimore, M.D., Topeka, term expires 1938.

Fifth District—Marion Trueheart, M.D.,

Sterling, term expires 1938.

Sixth District—W. P. Callahan, M.D., term expires 1940.

Seventh District—F. R. Croson, M.D., Clay Center, term expires 1939.

Eighth District-L. S. Nelson, M.D., Sa-

lina, term expires 1939. Ninth District—Walter Stephenson, M.D.,

Norton, term expires 1938.

Tenth District—C. D. Blake, M.D., Hays, term expires 1940.

Eleventh District—A. C. Armitage, M.D., Kinsley, term expires 1938.

Twelfth District — G. O. Speirs, M.D., Spearville, term expires 1940.

The Delegate for the American Medical Association meeting was elected as follows:

J. F. Hassig, M.D., 1937-1938.

Dr. L. F. Barney moved that a vote of thanks be extended to the Shawnee County Medical Society for the successful 1937 Annual Session of the Society. Seconded and carried.

Adjournment followed.

COUNCIL MEETING

A meeting of the Council was held at the Hotel Jayhawk in Topeka on May 6, 1937.

Members present were:

H. L. Snyder, M.D.

J. F. Gsell, M.D.

H. L. Chambers, M.D.

George M. Gray, M.D.

R. T. Nichols, M.D. L. F. Barney, M.D.

E. C. Duncan, M.D.

J. L. Lattimore, M.D. Marion Trueheart, M.D.

W. P. Callahan, M.D.

F. R. Croson, M.D.

L. S. Nelson, M.D.

A. C. Armitage, M.D.

N. E. Melencamp, M.D. George O. Speirs, M.D.

First order of business was the election of new members on the Defense Board and the Editorial Board. Dr. C. C. Stillman, Morganville, was re-elected to the Defense Board for a term of three years. Dr. Lucius E. Eckles, Topeka, was re-elected to the Editorial Board for a period of three years.

Wichita was selected for the place of meeting for the 1938 Annual Session and the dates ap-

proved are May 2, 3, 4, 5.

Instruction was given to the Executive Committee to provide \$600.00 of Society funds for payment of costs incidental to the 1937 Annual Session.

Upon a motion made by Dr. L. F. Barney, seconded and carried, instruction was given to the central office to remove all unpaid members from the mailing list effective June 1.

The Executive Committee was authorized to consider and make decision concerning enlargement of the central office and the employment of official Society attorneys.

Application for Society approval received from the Flo Brown Memorial Laboratory

(Continued on page 224)

REPORT OF THE NECROLOGY COMMITTEE

TO THE HOUSE OF DELEGATES:

By reason of the loss during the year of our esteemed Chairman of this Committee, Dr. J. T. Axtell, it becomes the duty of another member of the Committee to present the annual Necrology report.

I wish, therefore, to inform the Society that the following of our members have died during the year on the dates and from the causes below described:

Name	Town	Age	Date	Cause
Herbert Lee Alkire	Topeka	73	Apr. 27	Arteriosclerosis
Porter W. Barbe	Oswego	90	Sept. 7	Prostatitis
Charles S. Bendure	Baxter Springs	76	Sept. 11	Carcinoma rectum
Helen Genevieve Bond		65	Aug. 23	Cancer of breast
William Moorman Boone	Highland	76	Aug. 6	Coronary occlusion
Elmer Butler		74	Oct. 26	Bronchopenumonia
Charles Thomas Crandell		75	Oct. 28	Sclerosis of Coronaries
Herbert Elton Doty	Concordia	67	Oct. 19	Chronic Myocarditis
Trenouth Wright Edmonds		33	June 8	Accidental shock from x-ray
William Franklin Fee		73	Nov. 30	Influenza
William Downing Groff		71	Sept. 19	Coronary Occlusion
John Llewellyn Hamilton	Leavenworth	81	July 13	Arteriosclerosis
Fount Willard Huddleston		53	June 5	Erysipelas
Thomas Rene Hyatt		79	Aug. 27	Valvular Heart Disease
Walter Parker Irwin		63	Sept. 12	Acute Indigestion
William Kermott Johnson		79	Apr. 30	Chronic Nephritis
Robert A. McIlhenny		70	March 3	Coronary Occlusion
Stewart McKee		75	May 5	Prostatitis
Howard Earl Marchbanks	Pittehura	48	Aug. 7	Coronary Occlusion
Frank Keith Meade		61	Aug. 2	Angina Pectoris
Robert H. Miles		81	June 19	Skin Malignancy
Frank O'Hara Miller		61	Nov. 10	Chronic Endocarditis
Edwin Clyde Morgan	Clay Center	51	Apr. 27	Chronic Nephritis
Malcolm Newlon		50	Nov. 18	Coronary Emboli
H. W. Norrish		66	March 15	Mitral Regurgitation
Jesse T. Nugent		52	July 6	Cholecystitis
William D. Patterson		76	Dec. 3	Angina Pectoris
George D. Pendell		72	Feb. 18	Arteriosclerosis
Henry Fuller Pratt		74	Nov. 3	Cerebral Hemorrhage
Winsten I Domar	Destantian	54	Jan. 6	
Winston L. Ramey E. W. Reed		66	Feb. 25	Hydrocephalus Lobar Pneumonia
William E. Royster		66		
		69	May 31	Suicide—gunshot
Harry T. Salisbury		90	Aug. 22	Died outside state
Samuel H. Sidlinger		50 50	Dec. 28	Fracture Hip—fall
Joseph E. Skaggs		, ,	Jan. 20	Carcinoma
Albert Smith		66	Sept. 13	Chronic Nephritis
Guy A. Smith		53	March 17	Chronic Myocarditis
Franklin Eliada Way	I almo	68	June 18	Myocarditis
James Amasa Hampton Webb		59	Aug. 5	Carcinoma Lung
Charles S. Webster		90	Nov. 14	Chronic Nephritis
Julius Wesselowski		78	Apr. 17	Coronary Occlusion
Frank M. Wiley		81	March 12	Cerebral Arteriosclerosis
Peter B. Witmer		67	Aug. 24	Coronary Thrombosis
W. S. Yates		69	March 29	Carcinoma Throat
William Hay Young	Fredonia	63	Aug. 13	Mesenteri Thrombosis

I can pay no finer tribute to these excellent brothers of ours than to quote to you the statement made by our good Chairman in the rendering of this same report at the last session of the Society:

"Let us pause a moment in silent respect for these our comrades. They were our friends and fellow workers. Many of them we loved dearly. Yesterday we worked side by side; today they have passed to the great beyond 'from whence no traveler returns.' We believe and hope the great mystery of life has been solved by them. It only remains for us to take up the great work for humanity which they have laid down. 'So live that when thy summons comes to join the innumerable caravan that moves to that mysterious realm, where each shall take his chamber in the silent halls of death, thou go, not like the quarry-slave at night, scourged to his dungeon, but sustained and soothed by an unfaltering trust, approach thy grave, like one who wraps the drapery of his couch about him, and lies down to pleasant dreams'."

May we stand in a moment's reverence to those who have completed so well their task in life.

JAMES Y. SIMPSON, M.D. Neurologist and Addictologist HERMAN S. MAJOR, M.D. Neuro-Psychiatrist

SIMPSON-MAJOR SANITARIUM

3100 Euclid Avenue, Kansas City, Mo.

Electricity

Heat

Water

Light

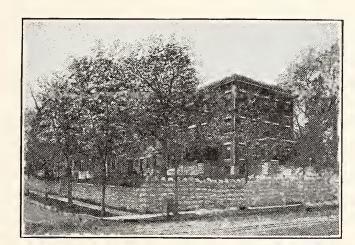
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was referred to the Sedgwick County Medical Society for recommendation.

Dr. J. F. Gsell was authorized to appoint a committee of three members to confer with the Kansas University Endowment Association toward utilizing certain available funds for medical research.

Applications for Society approval from the American Physiotherapy Association and Kansas Society of X-Ray Technicians were referred to a special committee for investigation and recommendation.

Dr. H. L. Chambers was authorized to make arrangements for participation of The Society in the Kansas Academy of Science.

The House of Delegates also approved an annual increase of \$1,200.00 in salary for the Executive Secretary Clarence G. Munns, and an annual increase of \$120.00 in salary for Mrs. Elizabeth Grinstead.

Adjournment followed.

NEWS NOTES

SALES TAX

Representatives of The Society have submitted a brief to the State Tax Commission pertaining to rules and regulations governing physicians under the Kansas Sales Tax and have also recently held several conferences with the commission in that regard.

While it is definite that professional services are not taxable under the Kansas law, a question does arise as to tangible personal property utilized as an adjunct thereto (medical supplies, dressings, equipment, etc).

The following regulation was prepared and submitted by The Society:

'Physicians, dentists, and veterinarians primarily render professional services, and such services are not taxable. They are users and consumers of such tangible personal property as medicines, drugs, vaccines, dressings, appliances, instruments, equipment, x-ray films, metals, minerals, cement, plates, bridges, and similar commodities used by them incidentally in the performance of their professional services, whether or not such items are separately billed to patients. The person selling such articles to a physician, dentist, or veterinarian is deemed to be making a sale for use or consumption, and must collect and remit the tax thereon. Where physicians, dentists, and veterinarians sell tangible personal property entirely separate and apart from their rendering of professional services, they are deemed to be making retail sales, and the tax thereon must be collected and remitted by the physician, dentist, or veterinarian making the sale."

It seems probable at the present time that this or a similar regulation will be adopted. This is believed to handle satisfactorily all problems thereunder with the exception of eyeglasses which present several different complications. Discussion is now being had with the commission on the latter subject.

A bulletin describing fully the obligations and relations of physicians under the Kansas Sales Tax will be forwarded to all members as soon as all arrangements are completed.

A. M. A. ANNUAL SESSION

The Eighty-eighth Annual Session of the American Medical Association will be held in Atlantic City, New Jersey, from Monday, June 7, to Friday, June 11, 1937.

The House of Delegates will convene on Monday, June 7, in the Renaissance Room of the Ambassador Hotel, Boardwalk at Brighton Avenue.

The Scientific Assembly of the Association will open with the General Meeting held on Tuesday evening. June 8.

The various sections of the Scientific Assembly will meet Wednesday, June 9, at 9 a. m. and 2 p. m. and subsequently according to their respective programs.

The Registration Department will be open from 8:30 a.m. until 5:30 p.m. on Monday, Tuesday, Wednesday and Thursday, June 7, 8, 9, and 10, and from 8:30 a.m. to 12:00 noon on Friday, June 11.

NEW APPOINTMENTS

New appointments recently announced by Governor Walter Huxman are as follows: Dr. F. S. Hawes, Russell, to the Board of Medical Examination and Registration; Dr. J. W. Spearing, Cimarron, Dr. A. J. Rettenmaier, Kansas City, and Dr. J. L. Lattimore, Topeka, to the Kansas State Board of Health.

KANSAS STATE BOARD OF HEALTH

Dr. Earle G. Brown resigned his position as Secretary of the Kansas State Board of Health effective May 1. He will leave Topeka on approximately May 15 to accept a position as Director of Public Health for Arlington County, Virginia.

The Kansas State Board of Health, at a meeting held on April 21, appointed Dr. H. R. Ross, Director of the Division of Maternal and Child Welfare as temporary successor. Appointment of the permanent successor will be made by the Board by approximately June 1.

SEDGWICK CLINICAL ASSEMBLY

The Second Annual Spring Clinical Assembly of the Sedgwick County Medical Society was held on Tuesday, April 6, at the Allis Hotel in Wichita. The program consisted of a full day of clinics presented for postgraduate study by the Sedgwick County Medical Society and the Rotating Staff of the Sedgwick County Charity Hospital. Distinguished guests at the meeting were Dr. Alton Ochener, Professor and Director of Surgery, Tulane University School of Medicine, New Orleans, Louisiana; and Dr. Henry M. Winans, Professor of Medicine, Baylor University School of Medicine, Dallas, Texas. Twelve motion pictures on scientific subjects were shown all day upon request and thirteen scientific exhibits were assembled for inspection in the ball room foyer of the hotel.

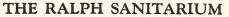
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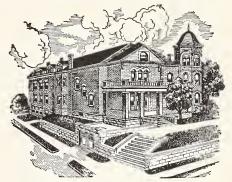
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BASIC SCIENCE BROCHURE

The Florida Medical Association and the Michigan State Medical Society requested and received permission from The Society to reprint the Basic Science brochure for use in their legislatures.

Several other states requested extra copies of the brochure for similar purposes.

POST GRADUATE COURSE

The Menninger Clinic, Topeka, held its Third Annual Post Graduate Course on "Neuropsychiatry in General Practice" in Topeka, April 19 to 24. Speakers included members of the Menninger staff and Dr. Franklin Ebaugh, Denver, Colorado; Dr. Winchell M. Craig, Rochester, Minnesota; and Dr. J. W. Kernohan, Rochester, Minnesota. Physicians from fourteen states attended the sessions.

ANNOUNCEMENTS

The Annual Post-Graduate Course and Clinical Conference of the Saint Louis Clinics will be held in St. Louis, Missouri, from May 24 to May 29. The program will be given solely by members of the medical profession of St. Louis, with Medical Officers of the Army and Navy participating. It will consist of lectures, demonstrations and clinics on medical and surgical subjects.

COUNTY SOCIETIES

Speakers at a meeting of the Bourbon County Medical Society held April 1 in Fort Scott were Drs. Hubert M. Parker and Vincent T. Williams, Kansas City, Missouri. The former's subject was "The Thyro-Toxic Factor in Heart Disease", while the latter spoke on "The Surgical Treatment of Goiter".

Three meetings of the Butler-Greenwood County Medical Society have been held in Eldorado recently. At the first, on February 12, Dr. George Gsell of Wichita spoke on "The Eye Complications in Diabetes" and Dr. W. G. Gillett, also of Wichita, discussed "The Eye in General Practice". He stressed myopia and its more severe complications.

At the March 12 meeting Dr. Fred McEwen, Wichita, presented a paper on "Myocardial Failure", which he illustrated with drawings and lantern slides.

The last meeting was on April 9. Dr. J. H. Johnson, Eldorado, reported on the county wide immunization drive for smallpox and diphtheria; Dr. L. F. Steffen, Eldorado. Director, Butler County Public Health Department, discussed phases of health work in Butler County; Dr. C. E. Boudreau, Eldorado, and Dr. J. H. Johnson told of several interesting cases in their practice; and Dr. C. H. Warfield of Wichita spoke on x-ray therapy.

The Greenwood County Medical Society for Indigent Care met in Eureka on March 3, with several Oklahoma and Kansas physicians and druggists as guests. Dr. E. K. Musson of the Kansas State Board of Health at Topeka spoke on "Communicable Disease Control".

Members of the Central Kansas Medical Society met in Ellsworth on March 18. The program consisted of papers presented by two Topeka physicians, Dr. Harry J. Davis and Dr. Lucius Eckles. Their subjects were "Electro-cauterization and Electro-coagulation of the Uterine Cervix" and "Rheumatic Infection" respectively.

Miss Christina Lohrmann, county poor commissioner and case supervisor, was a guest of the Cherokee County Medical Society at the March 10 meeting in Columbus. She discussed the problems of medical aid for relief clients of the county. Dr. C. C. Fuller of Columbus, presented a scientific paper entitled "Pharmacopeia and the Physician".

A meeting of the Clay County Medical Society was held at the Clay Center Hospital on April 14. Dr. Warren Morton gave a report of the committee appointed last year to confer with the hospital board regarding purchase of permanent equipment. Dr. J. L. Lattimore, Topeka, gave an illustrated talk on "The Interpretation of Laboratory Reports".

The Cowley County Medical Society met in Arkansas City on March 19. Drs. G. O. Giffin, K. Armand Fischer and Delbert A. Ward, all of Arkansas City, led a discussion of post mortem studies.

Eighteen members of the Crawford County Medical Society were in attendance at a dinner meeting in Pittsburg on March 18. Dr. J. C. Montgomery of Wichita discussed "The Surgery of the Gall Bladder" and Dr. D. R. Black of Kansas City Missouri, spoke on "Jaundice".

Another meeting of this society was held on April 5 to outline follow-up work on tuberculin tests recently given to Crawford County senior and junior high school students.

The Dickinson County Medical Society assembled in Abilene on April 15 for its regular quarterly dinner meeting. A paper on "Clinical Pathology" was presented by Dr. J. L. Lattimore, Topeka.

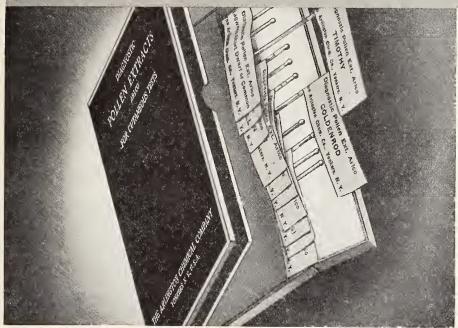
Edwards County Medical Society held a meeting in Kinsley, March 11, at which time decision was made that the entire society would attend the dinner meeting of the Ford County Society on the following night in Dodge City. Dr. F. E. Dargatz, Kinsley, displayed his collection of panels depicting various methods of health insurance as practiced in several of the leading nations of the world, at the Ford County meeting. Featured speaker of the Ford meeting was Dr. Edward Hashinger of Kansas City, Missouri. His subject was "Treatment of Endocrine Diseases".

Open Forum for discussion of The Behavior Disorders, The Problem Child, and Prevention of Tuberculosis in Children, was held under the austices of The Franklin County Medical Society at the High School Auditorium in Ottawa, April 28. Dr. Ralph M. Fellows, and Dr. Frank Koenig of the State Hospital at Osawatomie, and Dr. F. A. Trump, Ottawa, were the speakers.

The forty-eighth annual session of the Golden Belt Medical Society was held in the new Municipal Auditorium at Junction City on April 1. Dr. J. M. Porter. Concordia, was elected president; Dr. Otto Kiene. Concordia, vice president; and Dr. Kent Duray. Salina. secretary. Speakers at the scientific session were Dr. M. E. Pusitz, Topeka; Dr. H. L. Snyder. Winfield; Dr. C. Wortly, St. Joseph, Missouri; and Dr. Wendell Long, Oklahoma City, Oklahoma. Approximately seventy-five members were in attendance.

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The Lyon County Medical Society held a dinner meeting in Emporia on April 6. Thirty-four members were present and heard a program given by Dr. Phillip Morgan and Dr. Charles Underwood, Emporia. Their paper, entitled "Electrocardiography" was illustrated by lantern slides.

Dr. E. R. Schmidt of Newton was the speaker at a dinner meeting of the Marion County Medical Society held in Newton, March 3. His subject was "Cystitis".

The society met for dinner and a business session on April 21 in Marion. Approval was given to a group advertising campaign to appear monthly in local newspapers.

Fifteen physicians of the Montgomery County Medical Society met in Coffeyville on March 19 for a scientific session.

On April 9, an orthopedic clinic was held under the auspices of this society and the Kansas Crippled Children's Commission.

Dr. J. L. Lattimore, Topeka, addressed a meeting of the Meade-Seward County Medical Society in Liberal. March 5. His paper was on "Clinical Pathology".

At a meeting on April 2, Dr. Ray M. Balyeat. Oklahoma City, Oklahoma, was the speaker. He presented an illustrated lecture on the cause and treatment of bay fever, asthma, hives and migraine.

Approximately 1,700 school children and others in McPherson County have been given diphtheria toxoid immunizations in a program sponsored by the McPherson County Medical Society and the county commissioners.

At a meeting of the Osage County Medical Society held in Lyndon on February 18, Dr. E. H. Decker, Topeka, spoke on "Common Skin Diseases".

Dr. Charles Taylor, Superintendent of the State Sanatorium for Tuberculosis at Norton, spoke on "Tuberculosis" before a dinner meeting of the Pratt County Medical Society held February 26 in Pratt.

A luncheon meeting for discussion of business was held in Pratt on March 3.

The members of Kingman County Medical Society were hosts to the Reno County Medical Society at a picnic held the afternoon and evening of April 23. In the afternoon fishing and golfing were available, followed by dinner at Calahan's club house. In the evening a scientific program was given in the Chamber of Commerce club rooms in Kingman.

Election of officers was the main order of business at a meeting of the Rush-Ness County Medical Society in La Crosse, April 13. The following physicians were elected to serve for the coming year: Dr. D. B. Parker. Ransom, President; Dr. L. A. Latimer, Alexander, President Elect; Dr. J. E. Attwood, La Crosse, Secretary-Treasurer; Dr. L. A. Latimer, Delegate.

Following the election a scientific program was presented. Dr. Otis True of Hays gave a paper on "Spinal Anesthesia" and Dr. W. J. Singleton, La Crosse talked on "A Phase of Psychology".

The April dinner meeting of the Shawnee County Medical Society was held at the Hotel Jayhawk, Topeka on April 5. An honorary guest was one of the members, Dr. A. G. Smith of Oskaloosa, who has been in practice over fifty years. Dr. H. L. Snyder. Winfield, was also a guest and Dr. J. L. Lattimore, Topeka, presented a

paper on "Interpretation of Laboratory Procedures". Deregates were elected for the Annual Session.

Drs. Cecil G. Leitch, Orval R. Withers, and Richard G. Helman, Kansas City Missouri, were the speakers on the program of a dinner meeting of the Southeastern Kansas Medical Society in Iola, March 23. Dr. Leitch spoke on "An Analysis of the Causes of Sudden Death", Dr. Withers on "The Treatment of Bronchial Asthma", and Dr. Helman on "The Toxemias of Pregnancy".

A dinner meeting of the Sumner County Medical Society was held in Wellington on March 18. The following program was presented: "Reflections on the X-ray Examinations of Fractures", with lantern slides. Dr. E. H. Skinner, Kansas City, Missouri; "Medical Motion Pictures", Dr. J. Allen Howell, Wellington; and a scientific paper, Dr. Miles W. Barnes, Caldwell.

The Kay County (Oklahoma) Medical Society entertained the physicians of the Tri-County Medical Society at Ponca City, Oklahoma, April 1. The members of the Cowley and Sumner County Societies were those in attendance. The program consisted of an afternoon session and a dinner meeting, with the following speakers and subjects presented: Dr. C. C. Nesselrode, Kansas City, Kansas, "Differential Diagnosis of Malignancies of the Stomach", "Various Injection Treatments of Varicose Veins With the End Results"; Dr. W. C. Menninger, Topeka, "The Psychological Factors in Medical and Surgical Condition", "The Psychiatric Examination, An Approach to the Nervous Patient"; Dr. Nelse F. Ockerblad, Kansas City, "History of Urinary Calculus", "Treatment of Urinary Infections by Mandelic Acid".

A meeting of the Wabaunsee County Medical Society was held in Eskridge on March 16.

The regular meeting of the Washington County Medical Society was held on March 17 in Washington. Drs. A. O. Skinner and J. A. Burford, of the Nebraska Institution for the Feebleminded at Beatrice were the speakers. Their discussion concerned the work being carried on in their institution.

On April 13 this society met again at Washington for a dinner session, with a paper on "Tularemia" presented by Dr. F. E. Rogers of Linn,

Dr. Galen Tice, Kansas City, lectured on "X-ray Studies of the Heart" and Dr. Don Carlos Peete, Kansas City, on "Post-Influenzal Myocarditis" at a dinner meeting of the Wilson County Medical Society at Neodesha. April 12. The entire membership of the society and fifteen physicians from neighboring counties were present.

On April 20 a special meeting of the society was held to consider the establishment of a county health unit.

Regular meetings of the Wyandotte County Medical Society were held March 16 and April 6. The March meeting was a joint session with the Jackson County Medical Society and was held in Kansas City. Missouri. Dr. C. S. Beck, Associate Professor of Surgery. Western Reserve University of Medicine, Cleveland, Ohio, was the speaker. His subject was "Recent Advances in Car-Jiac Surgery".

The program at the April meeting consisted of papers presented by Drs. O. W. Davidson, Kansas City: and La Verne B. Spake, Kansas City. Dr. Davidson's paper was on "Diagnosis of Urological Conditions" and Dr. Spake spoke on "Foreign Bodies in the Bronchi".

MAY, 1937

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MEMBERS

Dr. M. L. Brakebill has recently moved from Peabody to Morland, where he will enter practice.

Dr. W. G. Emery, who was for a time prison physician at Lansing has located in Barnard where he will establish a general practice.

Drs. H. W. Nye and Andrew P. Brown have established joint offices in Osborne.

Dr. Ralph Fellows, Superintendent of the State Hospital at Osawatomie, and Dr. Frank Koenig, resident physician at the hospital; spoke March 19 before the Child Guidance Committee of Kansas City, Kansas.

Dr. G. L. Hooper, former secretary of Ford County Medical Society, has left Dodge City to establish practice in Pueblo, Colorado.

The Inman, Kansas Review under date of March 26, pays tribute to Dr. J. W. Johnson, who recently celebrated fifty years in the practice of medicine. Dr. Johnson first came to Kansas in 1887 and settled at Formosa.

"Dr. Johnson states that antiseptic surgery was in its infancy when he was graduated. His first operation was an amputation of a leg in which he used a carpenter's saw. There were no quarantine laws in the early days and it was quite difficult to combat contagious diseases effectively. Dr. Johnson says that he always owned good horses to make his rural calls. He bought his first two-cylinder car in 1907. The horse and buggy days were over for the doctor and he has always enjoyed this mode of travel."

Drs. E. J. McCreight and Vance Morgan were in charge of a program on public education on syphilis and other venereal diseases which was carried out by the Lyons Club at a luncheon held March 29, in Liberal.

Dr. C. L. Ramsey, formerly of Everest, has recently located in Nortonville.

Dr. Charles A. Royer, Kiowa, left on about April 1 for New York City, where he will take special eye, ear, nose and throat work in the Columbia University post-graduate school and hospital. He will be in New York for a year and one-half. His practice in Kiowa has been taken over by Dr. Joseph D. Warrick, formerly of Chicago.

Dr. Samuel J. Schwaup was elected Mayor of Osborne early in April. He has the distinction of being the first native son ever to be elected mayor of that town.

Dr. Francis Thorpe of Detroit, Michigan, will establish a general practice in Pratt, where he has moved recently. Dr. Thorpe is a graduate of Northwestern University School of Medicine and has been in the medical department of the Chrysler Corporation.

DEATH NOTICES

Dr. James C. Creel, 70 years of age, died at Mercy Hospital in Parsons on March 21. Born in Afton, Iowa, in 1867, he attended the University of Iowa and the Marion Sims Medical College of St. Louis, from which he received his degree in 1899. In 1903 Dr. Creel was appointed supervising division surgeon for the Katy employee's hospital in Parsons, which position he held

until retirement the first of this year. He was a member of the Labette County Medical Society.

Dr. Hubert Guthrie Herring, 53 years of age, died at the Johnson Hospital in Chanute on March 25. Dr. Herring was a resident of LeRoy, where he had been in practice since 1915. He received his medical education at the Ensworth Medical College in St. Joseph, Missouri, from which he was graduated in 1906, and had been for years an active member of Coffey County Medical Society.

Dr. John Morton McWharf, 95 years of age, died in Menorah Hospital, in Kansas City, Missouri, on March 20. Dr. McWharf was born in Rose, Wayne County. New York, in 1842. He started his academic course at Moravis, New York, and finished it at Falley Seminary in Fulton, New York. He graduated in medicine from the University of Buffalo in 1868. Following his graduation Dr. McWharf spent eighteen years in general practice in Chautauqua County, New York. He moved from there to Fort Scott where he lived for twelve years, and then to Ottawa where he resided until his death. The later years of his practice were devoted to eye, ear, nose and throat work. He was a member of the board of trustees of Ottawa University, acting at one time as vice president, and was an honorary member of Franklin County Medical Society.

Dr. William C. McDonough, 70 years of age, died at St. Francis Hospital in Topeka on April 17. Dr. McDonough was born in 1867 and graduated from Rush Medical College in Chicago in 1881. He had practiced medicine and surgery in Topeka since 1901 and was an active member of Shawnee county Medical Society.

Dr. Rolla B. Stafford, 59 years of age, died at Christ's Hospital in Topeka on April 26. He received his degree from the University Medical College of Kansas City in 1901, and following graduation practiced in Walnut until 1925. From that time until his death Dr. Stafford had served in public health work with the exception of a year in private practice in Salina (1933-34) as full time county health officer for Geary County until 1928, Brown County from 1928 to 1931; as Commissioner of Health for the Virgin Islands from 1931 to 1933; as assistant health officer for Sedgwick County from 1934 to 1935; when he went to the State Board of Health at Topeka as Director of the Division of Local Health, which position he held at the time of his death. He was a member of Shawnee County Medical Society.

NEW BOOKS RECEIVED

SYNOPSIS OF PEDIATRICS—By John Zahorsky, M.D., Professor of Pediatrics and Director of the Department of Pediatrics, St. Louis University School of Medicine, and T. S. Zahorsky, M.D., Instructor in Pediatrics, St. Louis University School of Medicine. Published by The C. V. Mosby Company at \$4.00 per copy.

HANDBOOK OF ORTHOPAEDIC SURGERY—By Alfred Rives Shands, Jr., M.D., Associate Professor of Surgery in Charge of Orthopaedic Surgery, Duke University School of Medicine, and Richard Beverly Raney. M.D., Instructor in Orthopaedic Surgery, Duke University School of Medicine. Published by The C. V. Mosby Company at \$5.00 per copy.

MAY, 1937

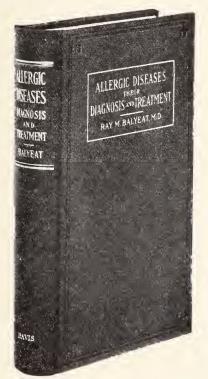
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RAY M. BALYEAT, M.A., M.D., F.A.C.P.

Associate Professor of Medicine and Lecturer on Diseases Due to Allergy, University of Oklahoma Medical School; Chief of the Allergy Clinic, University Hospital; Consulting Physician of St. Anthony's Hospital and to the State University Hospital; President of the Association for the Study of Allergy 1930-1931; Director, Balyeat Hay Fever and Asthma Clinic.

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XXXV. XXXVIII.

Gastrointestinal Allergy.
Allegric Dermatoses (I. Eczema, II. Contact Dermatitis).
Drug Therapy as a Palliative Means in the Treatment of Hay Fever and Asthma.
Migraine.
Urticaria | Hives). XXX. XXXVI. XXXVII.

XXXIV. XXXIV.

Fungus Infection and Its Allergic Phase.

Allergic Conjunctivitis.

Eliminative Measures in the Treatment of Food-Sensitive Patients.

Eliminative Measures and Desensitizing Methods in the Treatment of House-Dust-Sensitive XXVII.

XX. Facial and Dental Deformaties Due to Perennial Nasal Allergy in Childhood.

This book offers the physician a guide to the practical methods of the diagnosis and treatment of allergic diseases. The material is arranged primarily to make available to the general practitioner the approved diagnostic and therapeutic procedures dealing with allergic diseases. It is the work of an experienced teacher and a pioneer in the study and treatment of diseases due to allergy.

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AUXILIARY

Edited by Mrs. W. G. Emery, Press Publicity Chairman

The following, taken from the letter of Mrs. John L. Bauer, of the National Press and Publicity Committee, is worthy of wide reading:

"Likewise it would seem to follow that the members of an auxiliary all of whom are highly intelligent are challenged to analyze their mode of living to determine whether they are using their time and talents to the best advantage. In this self-analysis, I beg of you to carefully consider whether you are living up to the obligations of your membership in your county auxiliary. Are you contributing your talents? Are you using some of your valuable time to study health problems, to read Hygeia, to learn what is being done in public health work, to read county, state and A.M.A. journals, especially the woman's auxiliary articles and the news letter? Are you acquainting yourself with medical legislation? In short, are you becoming an informed member? An informed member becomes a valuable member."

The Labette County Auxiliary met March 23 at the home of Mrs. G. L. Maser. The following officers were elected for the ensuing year: president Mrs. G. L. Maser; president-elect Mrs. Mirl Ruble; vice-president, Mrs. Charles Miller; secretary-treasurer, Mrs. G. W. Hay.

Mrs. C. S. McGinnis read an excellent paper on "New Developments on Medicine." Refreshments were served to twelve members, one out of town member and the special guests.

The Pratt County Auxiliary after a dinner at the Hotel Roberts, Pratt, met in business and social session at the home of Mrs. W. D. Pitman, 202 South High Street. The election of officers resulted as follows: president, Mrs. C. M. Vermillion; vice-president, Mrs. C. V. Black; secretary-treasurer, Mrs. M. E. Christman; reporter. Mrs. W. D. Pitman.

The Ford County Auxiliary held a dinner meeting at the Lora Locke Hotel in Dodge City, February 12. After a short business session following the dinner, Mrs. C. M. Anderson entertained with several piano numbers and gave a very interesting book review on "The Natives Return" by Adamic.

This auxiliary, March 15, sponsored a radio broadcast announcing the Cancer Control Program to be held in Garden City, March 17. The Ford County Auxiliary was represented at this meeting by Mmes. Williams, Dennis, Russell and Jackman.

Mrs. F. L. Dennis gave the principal address at the morning session of the Cancer Control Program.

Beginning April first the Ford County Auxiliary will present two radio programs each month, using Hygeia material exclusively as program material.

Mrs. R. D. Russell. Ford County Hygeia Chairman, reports seven additional subscriptions to Hygeia.

Mrs. W. D. Pitman was hostess to the Pratt County Auxiliary at a pot-luck supper in her home. Following the supper the members tacked two comforts for the Thrift Shop, a local volunteer relief agency.

The Labette County Auxiliary met the afternoon of February 23 at the home of Mrs. C. S. Maginnis. Plans were developed for a special meeting Wednesday, March 3, to be held in Parsons at the home of Mrs. T. D. Blasdel, president. Mrs. Leroy Bradfield, state lay representative of Cancer Control Program will, at this meeting, consult with the auxiliary in arranging plans for participation in a state group for the control of cancer. Mrs. Donald Youel gave an excellent review of "An American Doctor's Odyssey."

The Sedgwick County Auxiliary entertained their friends, March 8, at a guest day tea, held in the home of Mrs. D. W. Basham. The Wichita press describes the occasion as a lovely affair.

Mrs. Paul Oberg presented the musical program. Dr. Fred McEwen was the guest speaker, his subject being "Startling Advances In Medicine." The hostesses numbered eighty-six.

March 4, Mrs. J. W. Shaw and Mrs. Frank Emery presided as co-hostesses at a luncheon for members of the Sedgwick County Auxiliary Board. A business meeting followed the luncheon.

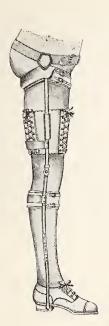
Mrs. George Cowles, of the Sedgwick County Auxiliary, was hostess at her home to the Sunny-Side Parent-Teachers Association which sponsored a colonial silver tea.

That large memberships are not necessary to carry out an efficient program is perfectly illustrated in the outstanding work this year of the Labette County Auxiliary. This organization was headed by Mrs. T. D. Blasdel of Parsons, who was also State Hygeia Chairman, and who accomplished much in the latter office, also. It is unfortunate that insufficient space forbids a detailed account of the 1936-1937 activities of the Labette Auxiliary.

The decision that there was no use in continuing an auxiliary because "There is nothing to be done" is the extraordinary report which reached this column late last month.

Nothing to be done! And those active in auxiliary work see so much to be done and too few to do it!

Medical societies everywhere are very much aware of many somethings to be done and are very busy trying to do them. With the public prints giving stories and plans for social security and state medicine, cannot doctors' wives, even if they are not told, reason that the action of



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the general public will decide these issues affecting the medical profession? Cannot they understand that, as members of lay organizations, they have an opportunity of exercising their influence in these clubs and societies in favor of the development of scientific health conservation? Do they not consider the medical profession of their community as the normal guardians of its sanitary condition? Is their community 100 per cent protected against the preventable diseases? Is it impossible to find any way to improve sanitary conditions of their county? Have they no quacks nor cultists, who detract from a high standard of medical practice and constantly attempt to disparage the practice of regular medicine? If so, these people have found utopia, and that is headline news Yet no rumor of such a place can anywhere be found. Or perhaps the masculine element of these medical families have suffered no defeats, are wholly successful in influencing the great majority of public opinion in favor of scientific medical purposes. Such a condition has escaped our attention also.

There is plenty of work for an auxiliary in each of our 105 counties. Wherever a doctor practices there is aid needed which his wife can effect. To enumerate everything which an auxiliary can find to do would consume more space than The Journal affords.

Mrs. J. Bonar White, National Chairman of Public Relations, writes the following in the March news letter:

"The tongue of the wise is health," but alas, the tongue of the ignorant speaks eloquently and gains momentum despite accessibility of knowledge from the medical profession. We often read astonishing recommendations, listen to voluminous chatter and charlatanry, feel indignant and await action—by someone else.

Many auxiliary and eligible auxiliary membres still are unaware of their potentialities for serving their medical societies, and abstain from work because they feel that small auxiliaries are impotent. Long ago the world disposed of size as a measure for success.

Every physician's wife, as an auxiliary member, may be a participant in excellent public relations work, without personal expense, undue exertion, or outside activity when circumstances curtail it. The evidence is positive that the one who must stay at home may be an active auxiliary member. Whatever type of reading she enjoys,—adventure, authropology, art, botany, customs, discovery, education, history, invention, literature, romance, et cetera, she may find in histories of medicine, in stories of medical pioneers and of the medical arts.

Is reading frequently limited to newspapers? Then clip every advertisement on health. Her public relations chairman wants data, oral and written, to give to her local medical society. Ambiguous, unreliable, dangerous assertions may be presented by it to newspapers and radio stations for deletion. This has been done—successfully.

For the member who has time to share activities in other organizations, reading (et cetera) will be important in her equipment for relationships with the public and in understanding the objectives of public relations. How long will many be content to work on any committee of lay organizations, but one relating to health? No one need hesitate to be on the latter because she is uninformed, as necessary knowledge is readily acquired through prescribed reading and attendance at auxiliary meetings. Of course thousands of members willingly and even zealously work under the direction of their advisors, but the assistance and vigilance of all are needed, because some person will become spokesman for each lay group. Will it be you, or will apathy divorce you from service?

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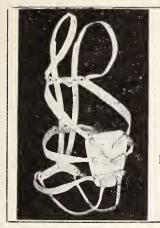
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★ Proc. Soc. Exp. Biol. and Med., 1934, 32, 241-245
 Laryngoscope, Feb. 1935, Vol. XLV, No. 2, 149-154
 N. Y. State Jour. Med., June 1935, Vol. 35, No. 11
 Arch. Otolaryngology, Mar. 1936, Vol. 23, No. 3
 Laryngoscope, Jan. 1937, Vol. XLVII, No. 1, 58-60



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N. Y. State Jour. Med. 1935, 35— No. 11, 590; Laryngoscope 1935 XLV, 149-154. Proc. Soc. Exp. Biol. and Med., 1934, 32, 241-245. Laryngoscope, 1937, XLVII, 58-60.
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THE JOURNAL

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NO. 6

PRESIDENT'S ADDRESS

H. L. SNYDER, M. D.

Winfield, Kansas

The President's address is an opportunity to express his appreciation to the membership for the honor conferred upon him. It has been a privilege and a pleasure to fill this position. There have been many difficult problems to consider and through your help certain accomplishments have been attained.

The past three years have convinced us that the order is changing. Many new things, some evolutionary, some that seem almost revolutionary, have been given us for consideration as a state and national problem. The Social Security Plan has given to the states many activities that heretofore have been carried on through the private practitioner. The next few months we must coordinate the activities of this program and medical practice. The very fine work of Dr. Forrest Loveland and his committee and Dr. E. C. Duncan and his committee was influential in writing into the law those things that would give organized medicine proper consideration. We are indebted to them. The incoming President will see to it that the practitioner is properly protected by information relative to this new set-up.

Organized medicine is faced with the problem of shaping its own affairs. The report of the Committee on the Cost of Medical Care, with the majority report favoring some form of state medicine, the minority report favoring the attitude of the American Medical Association, that the care of the sick is the problem of the medical profession, has provoked much comment both favorable and unfavorable. The layman, regardless of his mental attainment, ordinarily is unable to grasp the viewpoint of the ethical medical profession. He does not see the problems or the dangers of state medicine that are very apparent to every informed member of the medical profession. He does not appreciate that medical service is not a fabricated article that can be regulated by the cost of production and the cost of distribution alone. This unfortunate situation leaves us but one alternative, active participation in an educational program looking toward protective legislation to preserve the best things in medicine.

There have been many studies of the subject made, more, I think, with the idea of proving that some form of state medicine is essential than with the thought of actually getting the facts for an intelligent solution. However, the most recent one that has come to my desk is by the American Foundation and constructively covers the subject.

This work is a compilation of the ideas obtained from some five thousand letters received from twenty-one hundred medical men. The first group contacted were men who had been in practice twenty years or more. The second group were those in practice five years or less. Then, the third group was that group between five and twenty years in practice. It was thought that possibly there would be some divergence of opinion between these groups. The final conclusion is that there is not much difference in opinion, with this observation, that the young man, five years or less out of school, being in contact with those out-patient groups who were either indigent or on relief, naturally was sympathetic toward some proper provision for their care. In this report they have taken up practically every subject that could be considered, starting with the premise that "the consideration" is "what is best for the sick patient". The first subject considered is: "Is adequate medical care now generally available?" This naturally brought on criticisms and observations of the present situation. Some held that we have too many doctors, some that we have not enough, some that there is an improper distribution of men; others held that we do not have nearly enough good doctors, but too many that are not rendering a service that is adequate, either because of personal limitation or for some other reason.

The second general heading was the views on the general principles and considerations that should underlie the organization of medical care. In this chapter the general economic situation is discussed, explaining that the present question has arisen as a part of the general economic problem and raising the question as to "why pick on medicine". The suggestion was offered that perhaps with the passing of the depression the problem will be altered. It further goes on to discuss whether it is the better health of the race, rather than organizing and distributing medical care, that has a need for consideration. Birth control and caring for the hopelessly defective are given thought. The question is, "Whose responsibility is the health of the individual?" The individual himself should be the first concerned and responsible. However, it is evident that the health of the community, as a whole, is a more paramount issue of the state than it is a problem of physicians whose first concern is the individual.

There is a discussion of the public conception of health as a controlling factor. Serious thought is given to the fact that the public as a whole is not discerning in evaluating adequate medical care, cannot recognize the scientific values and shows the wildest extravagance in expenditures due to the deception of quacks and medicine promoters of various sorts. This naturally raises the question of the education of the people to a higher and more comprehensive conception of health as a necessity. My personal observation is that this is where the medical profession must come into its own in education, both with a general public education plan, and with continual day-by-day instruction by the physician, of the people, as to the values of definite proper medical services. Governmental help is considered in all its phases. It is criticized and analyzed for and against. We all recognize the value of the government in certain phases of medicine. We have our Federal Bureau of Public Health and our State Department. The State Board of Health of Kansas was established through the activities of this Society, and it has served us well. The medical profession has profited as much as the laity, and this state agency fills a definite need. The activity of this state agency should be thoroughly coordinated through and with the Kansas Medical Society and each county society.

The doctor-patient relation and free choice

of physician raises several questions. First, we must recognize that all physicians are not what they should be. There are those members of the regular medical profession that, while they may be honest, are definitely not up to standard. There is another group who, though competent, could be placed in the medical pirate class. The third group who are competent, ethical, and personally willing to consider both the patient's physical needs and to evaluate his economic ability to meet his obligations. The fourth, of course, the quack and the charlatan who prey upon the ill.

There have been definite evolutionary changes that have taken place because of the changes in our economic life. The medical profession has met the majority of these half way. It still cares for the indigent and those on relief whether they are being paid for it or not. In certain communities they have been paid by public funds. In the majority of the communities these groups have been cared for through all the years that have passed by the regular practitioners without pay. We certainly have been going through a social evolution in the last generation and have developed a class which assumes that the world or the government owes them a living with all the appurtenances, which would include medical care. Assuredly, if this goes on, some means of birth control of this group should be put into effect. If medicine is going to answer the question as to what we shall do, the quality of the care rendered will be the final determining

The chapter on medical education is full of information. It is a cross-section of opinions relative to the problems from the educator's standpoint; some taking the viewpoint that doctors should be culled at the source, and only those persons who are qualified mentally and temperamentally to practice medicine should be permitted to have the doctor's degree. Unfortunately, that does not make a permanent solution. Those persons who are unable to carry the work in a medical school go to a cultist school, are graduated before the members of their matriculation class, and go out to become pirates, lacking the ethical conception of the needs of the patient, and trained with the whole idea of practicing upon the human sick for money. There are many communities in Kansas where there is no regular medical attendant, but his place has been taken by a cultist who is serving that community, rendering a service that is about equal to that of the

doctor of the small place of forty years ago—certainly not any better.

Other problems considered in this compilation, in the order given, are: "Specialization"; "Group Practice"; "The Place of the Hospital in the Organization of Medical Care"; "Public Health Organizations"; "Experimentation with State, County, and Community Plans"; "Health Insurance"; and "Limited State Medicine and Private Practice". Time does not permit any lengthy discussion of these various phases of medicine. The advantages and disadvantages of all are given consideration in a thoroughly unbiased manner. This work offers the best compilation of opinions that has come to my hands. One observation is that the thing we need to be doing is planning for the future rather than formulating a plan that we are going to put in as a definite solution. Conditions will change from year to year. What might seem a proper solution today in five years from now would be entirely wrong. The responsibility of the medical profession does not cease in this state of social and economic flux but must be continued. That it has been a serious time to many members of our profession we do not deny. That it has offered opportunities to others of our profession who have a socialistic bent is equally apparent.

Out of it has come a definite awakening of the whole profession to the fact that we do not live alone. There are certain of us who take the viewpoint that we are responsible to our patients alone, that we will not accept any outside responsibility. However, it has reached the place where we must realize that if our interests are to be preserved we should be sitting in the councils which are formulating the new plans as they are developed. I am not arguing for or against any of these things. My personal reaction is that of an individualist, and my feeling and my habit have been to build a practice upon that basis, but to fail to recognize that we are confronted with the question of the changing order of things would be unwise indeed. The American Medical Association has taken a very definite stand upon the subject. In the Pennsylvania Medical Journal of March, 1937, Dr. Charles Gordon Heyd, President of the American Medical Association, has an article under medical economics, headed "Organized Medicine and Health Insurance". I wish to quote parts of it.

"We believe (1) that all features of medical service in any method of medical practice should be under control of the medical profession. No other body or individual is legally or educationally equipped to exercise such control

"(2) That no third party should be permitted to come between the patient and his physician in any medical relation. All the responsibility for the character of medical service must be borne by the profession.

"(3) That patients must have absolute freedom to choose a doctor of medicine who will serve them from among all those qualified to practice and who are willing to give service.

"(4) That in whatever way the cost of medical service may be distributed, it should be paid for by the patient in accordance with his means and in a manner that is mutually satisfactory.

"(5) That medical service must have no connection with any indemnity cash benefits.

"The insurance principle as applied to human sickness is acceptable only in buying hospital lodging and accommodations, food, and general nursing care. The insurance principle applied to the employment of professional services will fail because there is inherent in it defects that depend upon the variability of human beings. Medical service is not a mechanical gadget that can be fabricated. Medical service is the relationship of a physician and a patient, and both are animated human individuals, both equipped with their own personal psychology and the character of the medical service rendered is the application of scientific knowledge plus certain intangibles to the patient's medical problem. This is not an insurance proposition that can be calculated or estimated upon an actuarial basis.

"No patient should have cash benefits for being sick. Is it reasonable to suppose that a man, being sick, not working, in a hospital, being supplied with physical accommodations, food, and attention, and \$4.00 a day while sick, will be anxious to return to work?

"It has been estimated that to provide a comparable medical service as exists today on a government insurance basis would require ten to fourteen per cent of the payroll."

Sickness insurance would cover only the low income group. The indigent, those on relief, all rural workers and farmers would be left without medical provision. It would mean another bureaucracy unconcerned about the quality of medical care and with no conception of preventive medicine.

This discussion has been necessarily brief, sketchy, and has touched only the highlights.

However, in conclusion, I think we are warranted in the following observation:

First, it is the obligation of the medical profession to care for the sick. This implies that we shall maintain a high degree of personal efficiency, that services shall be rendered without neglect, that the patient shall have the advantage of consultation, the proper laboratory opinions, and the advantages that come from working as groups. Many small communities can be given the advantage of group practice and group opinions, even though those physicians practicing there are not connected in a business way, if they will work out the proper ethical attitude.

Second, we should do everything within our power to coordinate the activities of the State Health Department in immunization, care of indigent expectant mothers, care of crippled children, and in every other activity that has been delegated to the State Board of Health by the Social Security program. By so doing, the local medical units will receive the proper consideration and the public will be benefitted by the service that can be rendered.

Third, it is a personal obligation for each individual to carry on a continuous educational program in his daily contacts with patients, so that the laity may be informed of the advantages of regularly trained and licensed practitioners of medicine.

Fourth, there is no group in the state that carries a greater potential political power if they care to exercise it in a non-partisan way in the formulation and the application of the various social aspects which are being passed on to us by legislative enactment.

We can, and we must, accept our duty as citizens to conserve the essentials of proper medical care and to protect the public from unworkable socialistic schemes.

Therapeutic Claims Questioned.—The Federal Trade Commission has ordered the makers of St. Joseph aspirin to cease representations that their product gives quicker relief than other aspirins and is the "best thing in the world" to stop pain. Prohibited also were misleading claims as to purity and as to protection afforded by the

False representations concerning the therapeutic effects of electric belts and electric insoles made by the Electric Appliance Co., Burlington, Kans., are alleged in a complaint issued by the Federal Trade Commission.

The complaint states that no physiological function or pathological condition of the body will be changed in the slightest degree through use of either or both of the products. Misrepresentation of salesmen's earnings *From the Surgical Department of the University of Kansas is charged in the respondent's advertising for help wanted. Kansas Medical Society May 4, 1937.

THE MANAGEMENT OF INJURIES OF THE FACE AND JAWS WITH SPECIAL REFERENCE TO THE COMMON AUTO-MOBILE INJURY

EARL C. PADGETT, M.D.*

Kansas City. Missouri

On an average injuries of the soft tissues and the bony framework of the face receive a type of care which is less compatible with what elsewhere in the body would be considered good surgical care. Although the proper repair of a wound of the soft tissues is well known to certain individuals in the surgical profession, one would judge that the knowledge of the principles of the care are not-as commonly known as they should be, if the intermediate and late results that one sees are allowed as evidence. It is rather common knowledge that fractures in this region receive on an average poorer care than fractures elsewhere in the body. The general surgeon usually pays little attention to the fractures of the jaw bones and very often the dentist is not thoroughly enough grounded to carry out with wisdom the principles entailed.

At the present time a great many of the injuries to the face are caused by automobile In 1935 automobile accidents caused approximately 36,000 deaths and unquestionably a far greater number of severe injuries. Usually in such injuries the face does not entirely escape. But more tragic than the oft stressed sudden death is the suffering that some of these deformities of the face cause. For women especially the long bitter years of mental agony caused by cicatricial deformities is of extreme importance and even in men very often the psychological handicap imposed by disfigurements does help to blight an otherwise promising career.

TYPE OF INJURY CHARACTERISTIC OF **AUTOMOBILE ACCIDENTS**

Although the principles of the care of wounds of the soft tissues and wounds of the bony framework of the face are the same no matter what the cause of the injury, it may be well in passing to point out that the automobile characteristically causes two general types of injuries. The first and the less common is the injury which characteristically is sustained by the driver—the so-called "steering post injury". The second and more common

is the injury often sustained by guest passengers. The driver very often escapes serious injury because of the support given by the steering wheel. But sometimes he may relax his hold on the wheel and fall asleep. Then his chin is likely to strike the center of the steering wheel, causing laceration and fracture of the mandible. When the force of the impact is greater any part of his face may be thrown into the center of the steering wheel or his chest may be crushed by impact against the steering wheel post. Guest passenger injuries constitute about seventy-five per cent of severe crushing facial injuries and the majority of the victims are young women. (Fig. 1.) They have no support in front of them. When the speed of the car is suddenly lessened the head is thrown into the instrument panel or front seat which often results in lacerations and crushing of the mid portion of the face, including the maxilla, the nasal and the malar bones as well as the orbital rims. Sometimes, even if the bony framework is not injured, the fact that the patient is thrown into the glass windshield explains a certain type of long and deep incisive wound of the soft tissues.

PRELIMINARY EXAMINATION

After such injuries, of course, the first thing to do is to make a careful inspection which should include separation of the soft tissues to the depth of the wound. The position of the facial nerve and such structures as the parotid duct should be borne in mind. Whether or not such structures have been severed is important. The facial bones should be carefully palpated. With both index fingers the examiner should carefully palpate the supra and infraorbital bony rim and the zygoma. Separation of the attachments of the malar bone and fracture of the zygoma may thus be detected. Sometimes depression of the malar bone may be recognized by intraoral palpation with the index finger. The nose should be carefully palpated and if there is any question concerning fracture, an intranasal examination should be made. One should carefully palpate the maxilla and the mandible both externally and from within the oral cavity. It is almost unnecessary to point out that there are no two bones in the body which may be as thoroughly palpated with the finger as the mandible and the maxilla. Maxillary and mandibular fractures are usually easily recognized. It is seldom that a roentgenogram is necessary for the mere diagnosis of mandibular or maxillary fractures if one carefully inspects the teeth and carefully palpates the two bones for any displacement or abnormal mobility. Fractures of the ramus or the condyle, however, may be somewhat difficult to detect. When fracture is suspected, good roentgenograms may be necessary to be absolutely certain of the diagnosis.

TREATMENT

For the sake of description the care of facial injuries may be divided into two types—injuries of the soft tissues and injuries of the bony framework.



Figure 1

Photograph of a girl who sustained a very severe crushing injury of the nasal bones and anterior wall of both maxillary bones. The anterior wall of the maxillary bones was crushed inward into the antral cavity and the infraorbital rim was crushed downward and backward. The nasal bones were shoved backward into the nasal fossa along with the soft tissues. Immediately after the accident an entrance was made into the canine fossa, the antral cavity and the anterior wall of the maxilla was raised forward and the infraorbital rim was pushed upward into its proper position. Both antral cavities were then packed with vaseline gauze. Besides this the nasal bones were pried forward and molded into as good a position as possible. Both nasal fossa were packed with vaseline gauze. The lacerated wounds of the soft tissues were then carefully sutured with interrupted silk after very slightly debriding the skin edges where they seemed ragged. The packs were removed on the third day and were replaced again twice for a period of two days each time.

A. Injuries of the Soft Tissues: The remarks concerning the injuries of the soft tissues of the face may appear rather elementary. However, I am inclined to think that one can very nearly judge a surgeon's ability by watching the manner in which he repairs a lacerated wound. And about the face this is particularly true. After careful inspection, the first thing to do is to thoroughly clean the wound. All foreign bodies should be removed. Although one should conserve tissue whenever possible, often it is best to—by a process of careful de-

bridement—change the lacerated wound into an incised wound. About the face, however, this debridement should not be radical enough to lead to any ultimate distortion. When the likelihood of such seems to be the case one will be wiser if the wound is allowed to heal by secondary intention—the final repair being postponed until later. Very valuable tissue necessary to an eventual good result thus may be preserved. The debridement of the skin consists of carefully paring and freshening the skin edges so that the incision becomes a vertical one with the surface. About the face—because of its abundant blood supply—one can usually depend, to a considerable extent, upon thorough irrigation of the wound with some non-irritating fluid. In the depth of the wound one should remove tissue which is definitely devitalized. After this careful debridement, the wound is closed. (Fig. 1.)

The principles of wound closure should be an old story by now but very often one sees wounds in which it is evident that they have not been carried out. Unless the wound connects with a cavity harboring bacteria one should coapt the deep tissues carefully. A fine suture should be used. In many cases fine silk is good. But one may do just as well with fine catgut. All dead spaces should be obliterated. In the closure of the skin a subcutaneous suture may be of value but ordinarily if one uses small sharp cutting needles and very carefully takes pains to coapt the edges of the skin in such a manner that they fall at right angles to the surface, as good a scar will result as when one uses

a subcuticular suture. The two skin sutures of the most value are very fine waxed silk or horsehair. When the wound is going to be a dry one silk is just as good as horsehair. But horsehair sets in the tissue better when the surface of the wound is moist. Sutures should be interrupted, as a rule, and ordinarily should be placed as close together as every eighth of an inch. One should strive for absolutely accurate coaptation of the skin. (Fig. 1.) When there is little tension the sutures or at least most of them should be out by the end of the third day. It may seem that undue emphasis is placed upon this matter of suturing the wound, but so often one sees the wound sutured in a very rough manner with large heavy suture material such as large dermo or silk worm gut or even that most abominable of all skin sutures. rather heavy catgut, that some emphasis on this point may not be amiss.

On the face, the type of wound which usually causes the most ultimate disfigurement is a wound which has been cut obliquely to the surface. When such a wound heals the scar which forms in the incision contracts and gives a narrower base to the overlying tissues which causes the tissues above the scar base to become bunched. Thus, the surface has an uneven contour. Therefore, often when a very slanting wound of the skin is present, it may be well to get rid of the thin skin and subcutaneous tissue. The point is to bring together the skin edges and immediate subcutaneous tissue on some slight tension so that the incision is coapted at right angles to the surface by proper

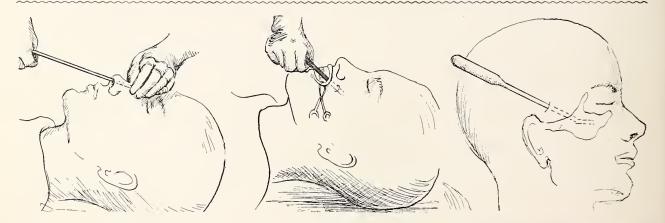


Figure 2

(a) Drawing of elevation of the nasal bones. As an elevator some narrow straight, smooth pointed instrument is used. A narrow straight sound makes a good instrument. The bones are elevated into the proper position with the right hand and with the left hand the contour of the bony framework of the face is palpated. Immediately after the bones are put into their proper position, the nose is packed tightly with vaseline gauze in an upward direction. No splint which might press downward is placed on the top of the nose.

⁽b) Method of entering the antrum through the canine fossa and molding the anterior antral wall forward and the infraorbital rim upward as it curved downward and backward.

⁽c) Gillies' method of raising a depressed malar bone. The incision is made back of the temporal muscle and a strong instrument is placed in beneath the temporal muscle behind the bone so leverage may be obtained of the lateral side of the skull.

paring and readjustment of the edges of the skin and subcutaneous tissue.

Especially for the oblique wound or when a pedicled flap has been used in the readjustment but also in wounds where there is likely to be a subcutaneous accumulation of blood or serum, it will be found that healing will be much smoother and quicker without the likelihood of infection if a very definite pressure dressing is used. Such a dressing not only prevents accumulation of secretions within the depth of the wound but it presses out the edema of the flap. Not only is immediate healing better but often there is less contracture from scar when the proper amount of pressure has been used. To gain an even resilient pressure nothing has been found which is superior to the wet marine sponge. Immediately next to the wound a layer or two of gauze is placed; then the sponge is bandaged snugly over the incision or flap. This dressing is allowed to become dry in its position, after which it becomes firm and forms more or less of a castlike mold.

On the face, no drainage is needed for the average wound. But if the wound communicates with a cavity containing bacteria, or if it is impossible to completely obliterate a dead space, some provision for drainage must be made. In the small wound a rubber dam drain may be sufficient but in the larger wound small rubber tubes may be more efficient.

Not all wounds of the face are of the incised or lacerated type. Occasionally one sees injuries in which a large part of the surface has been destroyed. Such a condition may follow a sliding, peeling type of force or a burn. Very often on the face when one encounters a wound of this type one is wiser if the surface is allowed to heal by granulation. The type of skin graft which gives the best surface covering on the face grows with much greater certainty when a clean field can be obtained. At this later time allowance may be made for contractures and heavy scars may be removed and the area resurfaced.

B. Wounds of the Bony Framework: As a general rule, whenever possible, the sooner a dissolution of the bony framework is corrected and held in correct position the better. The deformities which depression fractures cause after the immediate swelling of the soft tissues has disappeared is so marked and so very difficult to correct properly that all effort should be bent toward their early replacement. Immediately after fracture, malposition of the

bony framework of the face is usually relatively easy to correct. But after firm union has resulted, a satisfactory correction may be almost impossible.

The average doctor, because of his unfamiliarity with this field, views fractures of the bony framework of the face with a certain amount of hesitation. Very often he adopts a "do nothing" policy. This he should be encouraged not to do.

(1) Nasal Fractures—The nasal bones occupy a prominent position on the face and are very commonly fractured. Because swelling of the soft tissues develops rather quickly, it is very easy to overlook a nasal bone fracture especially the crushing type. Under cocainadrenalin anesthesia inside for the mucosa and novocain anesthesia for the outside, it is wise when in doubt to make a more careful examination. For purposes of exploration a small straight sound should be placed inside the nose. With the sound one may lift up on the bones and determine whether or not there has been any displacement. If there has been no displacement, no harm is done. But if the bones are displaced by means of a lifting force the bones may be removed into their proper position. (Fig. 2a, Fig. 1.) Ordinarily no splint is necessary to maintain correct position. Pressure on top of the fragments is contraindicated. Simple packing with vaseline gauze in an upward direction in a rather firm manner for two or three days acts as a support. When one wishes to maintain support for a longer time the packs are removed and replaced until the induration about the fragments has become firm enough so that they are held in good position. By this type of early care even when the fragmentation has been considerable, good position of the nose may be obtained.

(2) Malar Bone Fracture—A depressed fracture of the malar bone if not properly treated leaves a conspicuous depression above the bone. Every effort should be made to restore the bone to its former position. Many methods have been recommended for accomplishing this purpose. These methods are based upon two principles: First, some instrument with a cork screw or hook end is inserted through a small incision in the anterior cheek in such a manner that the bone is grasped and pulled forward. If the fracture is not too firmly impacted, such a procedure may be successful. Two, from behind through an incision through the temporal muscle an instrument is passed beneath the muscle, behind the malar bone from above the zygoma.





Figure 3

(a) Lateral roentgenogram of a fracture in which the lower part of the upper jaw was completely separated from the upper part of the upper jaw and base of the skull. This was due to an automobile accident.

(b) The head gear which was used to bring the upper jaw in position after the upper teeth were wired to the lower teeth. The lower jaw was used as a splint for the upper jaw. This head gear was made from an old felt hat and the lateral straps were made from heavy elastic. This head gear was not placed on the jaw until about ten days had elapsed at which time he could breathe through his nose.

By leverage pressure against the skull one attempts to throw the bone forward. (Fig. 2b.) By this method considerable power may be thrown under the bone. Most fairly recent fractures can be replaced by this method. And even if replacement is not possible by the method alone we may separate the four bony attachments of the bone with a chisel after which it may be pried forward.

(3) Depressions of the Anterior Maxillary Wall-Very often following severe crushing injuries of the face, the anterior maxillary wall is crushed inward. When the anterior part of the maxilla is driven into the antrum, a rather marked contoural defect of the front of the face is the result. When the infraorbital ridges are depressed and possibly knocked downward or backward into the orbit, if the infraorbital ridge is allowed to remain out of place the eye will drop downward and the inferior oblique muscle of the eyeball will be impeded in its function. Besides a staring defect of the palpebral fissure and a contoural defect of the infraorbital region, this very often causes the patient to have double vision. Fortunately, if cognizance is taken of it early it is comparatively easy to correct. The easiest way and the best way to correct these deformities is to enter the antrum through the canine fossa and with

a silver sound mold the bones forward into their proper position. The infraorbital ridge is moved upward until it seems to be in its proper position, and the anterior wall of the antrum is rounded out into its normal form. (Fig. 2c and Fig. 1.) Following replacement of the bony fragments very often the antrum is packed with vaseline gauze, which is left in place for two or three days. If, after this period it is decided that the bony structures still need some support, the gauze is removed, the antrum irrigated and the gauze is carefully replaced. With a spray cocain (four per cent) and adrenalin (fifteen to twenty drops to the ounce) is applied to the antrum for local anesthesia.

(4) Fractures of the Maxilla and the Mandible Proper—For the fixation of these fractures one broad principle usually suffices. For fractures of the body of the mandible, it has long been known that if the maxilla were not fractured and the teeth were present the maxilla formed an admirable splint for the lower jaw when the lower teeth were fixed to the upper teeth. It has not been so generally recognized that the same principles in an inverse manner may be applied to fractures of the maxilla. Because of this fact, a great many complicated and unusually unnecessary maxillary splints have been devised. In other words, when the

lower jaw is intact, it may be used for a splint and for support to hold the upper jaw intact. In such a case if the lower teeth are wired to the upper teeth, it necessarily follows—when one holds the lower jaw in its proper position—that the fractured upper jaw must unite with the teeth in occlusion.

Besides the matter of fixation of the bony fragments in fracture of the mandible especially —but also in fractures of the maxilla—it often is necessary to take into consideration that the fracture is a compound one and that a tooth in the line of fracture acts as a foreign body or as a sequestrum in a case of osteomyelitis. In maxillary fracture on account of the position of the bone dependent drainage is given spontaneously. In fractures of the body of the mandible such is not the case. As a rule, if at the time of fracture, there has been considerable disruption of the soft tissues about the line of fracture, dependent drainage is to be advised. Less sequelae of the nature that follow an infected fracture will result. For the same reasons although there are certain exceptions it is advisable to remove the tooth or teeth in the line of fracture.

A. Fractures of the Maxilla: Roughly one sees two types of fractures of the maxilla. First, the maxilla may be broken off on one side through the upper part of the alveolar ridge or the lower part of the maxilla itself. If the other side is sound, this fracture may be taken care of very efficiently by wiring the upper teeth to the sound side of the lower teeth. The opposite side of the jaw is used to support the loosened fragment. Secondly, the more difficult type of fracture of the maxilla, insofar as management is concerned, is complete separation of both bones from the base of the skull. As the bony structures are held up only by soft tissues, the lower fragments drop forward somewhat. For the care of this type of fracture many complicated splints have been devised. Either a metal cast or heavy wires are attached to the upper teeth. To whatever appliance is attached to the teeth, wire arms are brought forward out of the corner of the mouth. The arms are then bent backward towards the ear. By means of some type of more or less fixed head cap these wire arms are fixed in relationship to the skull. In other words, the upper jaw is held upward when the arms of the splint are attached to the skull appliance. To make a splint of this type is quite a task. If such appliances are improperly made or adjusted the upper teeth, after union has occurred, may not be in proper alignment or occlusion with the lower teeth. When the splint and the head appliance are properly constructed, very good results are obtained when the case is managed by this method. When a considerable amount of bone has been lost this undoubtedly is often the best type of appliance to use. Within recent years frequently the head appliance has been made with plaster Paris.

Recently we have used a simpler method than the preceding and the results have been good. The method assures proper occlusion of the teeth after healing has occurred. At first we do not try to replace the maxillary fracture until most of the swelling and edema have disappeared, that is, not until after about ten or twelve days following the injury. Not until the patient is able to breathe freely through his nose is anything done more than to assure the patient a proper airway through the mouth. During this time the nose is irrigated with a saline and adrenalin solution every two or three hours. After the air passages through the nose have become clear the upper teeth are wired to the lower teeth. A skull cap is placed over the skull. A chin cup is placed beneath the chin and body of the mandible. Between the chin cup and skull cap are placed rather strong elastic bands—two on a side. These bands are placed in such a manner that the chin and body of the mandible are lifted upward. The principle is to use the mandible as a splint and form for the maxilla. (Fig. 3a, b.)

This method assures proper occlusion and if the elastic bands are tightened sufficiently, the upper jaw is brought into proper position rather quickly. The method has the advantage of simplicity. Almost any one can do it and it has given us good results.

B. Fracture of the Body of the Mandible:

(a) A large variety of dental splints have been recommended for use in the management of fractures of the body of the mandible. But when there has been no bony loss for the vast majority of fractures of the mandible, dental splints are unnecessary. The principle of using the upper jaw for a splint to hold the lower jaw in position after the lower teeth are wired to the upper teeth is the most simple method.

A bilateral fracture of the submental region may be difficult to hold in place by wiring the lower to the upper teeth because of the spasm of the genio-hyoglossus muscles. In such a case one may resort to

placing circumferential wires entirely around the body of the mandible after which they may be run posterior to the alveolar ridge, through the palate and across the floor of the nostril and then downward beneath the upper lip. By this method the mental piece of bone can be held firmly upward in apposition with the maxilla.

(b) Fracture at the Angle:

Fracture of the angle sometimes is difficult to treat properly. The difficulty in such a fracture is the tendency of the muscles of mastication to pull the ramus of the jaw forward. When this happens and union occurs the patient will not be able to open his mouth.

There are two methods of handling this type of fracture. When the third molar is present often the ramus fragment inpinges against the tooth and the ramus is held downward and backward by it. When this is the case the third molar should not be pulled but should be left in position for a period of about three weeks. Immediately the lower teeth are wired to the upper teeth. After about three weeks the soft tissues about the fractures have become firm enough to hold the distal fragments in place. (Fig. 4b) and 5a.) Now with care one can remove the third molar to prevent its continued action as a foreign body. Usually this is not difficult as it will be found to be considerably loosened. When the third molar is absent or does not hold the ramus downward or backward, the most efficient method is to fix the ramus in its proper position by means of a wire which is anchored to a skull cap for a base. A small incision is made posterior to the angle of the jaw. The posterior border of the ramus is exposed. (Fig. 4c, and 5a, b.) A hole is drilled in the bone and a silver wire is passed through the hole. A plaster skull cap is placed on the head in which a heavy wire hook is imbedded. The hook extends down below and posterior to the lobe of the ear. The silver wire is then attached to the heavy wire hook of the plaster head gear. In the past we have united the ends of the bones with silver wire but this method usually caused some sequestration about the silver wire and sometimes interfered somewhat with union. Usually a secondary procedure was necessary to get the silver wire out. The method recommended is superior in that these secondary sequelae do not occur. On the other hand, a head cast is not always a comfortable appliance.

(c) Fracture of the Ramus:

One usually has no trouble in taking care of fracture of the ramus if one simply wires the lower teeth to the upper teeth. By this method good position ordinarily will be obtained.

(d) Fracture of the Condyle:

All that is necessary in most fractures of the condyle is to wire the lower teeth to the upper teeth until union is obtained. It used to be thought if the condyle turned forward due to the pull of the external

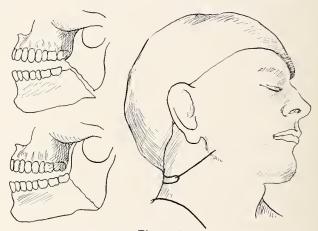


Figure 4 (a) Drawing showing the position of a fracture at the angle when the third molar is absent. The ramus tends to come upward and forward. If union is allowed to occur in this position, the patient will not be able to open his mouth.

(b) Drawing showing the third molar in position. When this occurs the ramus is held backward and downward in fairly good position due to the fact that the fragment impinges upon the third molar.

(c) Drawing of a good method of treatment for angular fracture when the ramus is not held backward by the third

fracture when the ramus is not held backward by the third molar. The apparatus consists of a head cast in which a wire hook is placed so that a second wire can be run through a hole in the posterior part of the ramus. This second wire is tightened when holding the ramus downward and back-

pterygoid muscle, that proper function would not be obtained. Unless the forward projection is very marked usually this is not true. Later, it will be found that the jaw can be opened and closed fairly well even though the condyle is not exactly in its proper position.

There is one little trick which may aid one in getting the condyle into relatively good position when it tends to be turned forward. Before one starts to wire the teeth together if the mouth is opened and the ramus is pushed upward so that its condylar neck falls forward, one may be able to get in contact with the condylar

fragment and it may be possible to hook some of the roughened edges of the bone over each other and then when the mandibular teeth are brought up against the maxillary teeth, the condylar head tends to be pushed backward into a position which is more nearly normal. We have been able to do this in several cases. The patient, of course, has to be under a general anesthetic for such a maneuver to be successful.

(e) The Edentulous Fracture:

The simplest and best method of handling an edentulous fracture of the body of the mandible is to use a splint shaped somewhat like a dental tray or even to use the lower denture if it has not been broken. The splint or the lower denture is placed over the lower alveolar ridge. Circumferential wires are placed about the mandible. The wires are then drawn tightly over the splint or denture and twisted. Thus, by means of a bridge support the fragments are held in their proper position.

(f) Fractures of the Mandible in Children:

It is not possible to wire the lower teeth to the upper teeth in children, as a rule. The teeth will not stand the necessary traction. Therefore, in this particular type of case sometimes it is necessary to make use of a dental cast which is cemented to the teeth.

LATE DEFECTS

The late defects of these injuries largely fall into three groups. In Group I the soft tissues may not have been properly readjusted originally in their proper relationship to each other. When it becomes evident that this is true, as soon as the wound has been thoroughly healed for a few weeks, one can go ahead and correct the maladjustment which should have been corrected in the first place. In Group II fall those injuries in which a large part of the surface is destroyed. Accidents which cause the patient to slide across a rough surface and burns give typical examples of this class of injury. These injuries may be described as two dimensional defects or areal defects. On the face usually if such injuries are allowed to heal by granulation, heavy keloidal scar and contraction may form but later these can be re-

The point is that on an average the type of skin graft (Thiersch or split skin graft) which one has to use to cover a granulating surface usually does not result in giving a good appearance on the face. The types of skin grafts (the stent, split, or the full thickness skin graft) best adapted to the repair of superficial facial defects should not be attempted on the face except in a clean non-granulating raw bed. When the proper time is selected for the repair of surface defects of the face the results that may be obtained may be quite remarkable. In Group III fall the cases where





(a) Roentgenogram of a fracture at the angle in which the third molar is present and holds the ramus in its proper position.

(b) Roentgenogram of a fracture at the angle in which the third molar is not present so that the ramus came forward. The roentgenogram was taken after a wire had been placed on the ramus and attached to the headgear described in Figure 4c.

the principle defect is one of contour. These defects are of the three dimensional type—not only is there a defect of area but one of depth.

Some of these soft tissue defects may be corrected by the transfer of a pedicled flap from some other area. The thickness of the flap may be sufficient to fill up the defect. For another type of defect, when a circumferential scar is a particular disadvantage a free transplant of fat may give the most pleasing final result. One has to remember, however, that any fat transplant will atrophy about fifty per cent during the first year after transplantation. The majority of contoural defects show some malposition or loss of the bony framework as well as a soft tissue defect. Usually the best tissue for filling out such depressions so that good contour is restored is cartilage. Especially is this true about the nose, the supraorbital ridge, the lower jaw, the infraorbital rim and over the antrum or the malar bone. Cartilage heals in permanently, will stand considerable amount of trauma and if properly cut and properly fitted to the defect largely will obliterate the depression.

Besides these areal or two dimensional defects and the contoural or three dimensional defects, whole organs such as the nose or the ear may be lost. Fortunately, a good workable imitation of these regions can now be built by the use of pedicled flaps from the soft tissues for the covering and cartilage for the framework. An example is that of a boy who had his entire ear removed in an accident and the entire ear was rebuilt by pedicled flaps from the neck and cartilage from the rib.

In conclusion, it may be said that facial disfigurements are a source of considerable mental anguish and not infrequently engender a psychologic handicap which may ruin a social and business career. On an average, these injuries are not handled as well as they should be. But when proper care is given, quite remarkable results will be obtained. When proper early care is available to the patient, usually that is sufficient. In case the early care has not been all that it should be or the original lesion was a particularly severe one, after healing has occurred reparative procedures have been developed so that most of the disfigurement can be eliminated. At the present time the automobile contributes the greatest number of these injuries to the face.

INSULIN SHOCK THERAPY: A CRITI-CAL REVIEW

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The aim of this paper is that of a review of the major publications dealing with insulin shock therapy in schizophrenia as originally described and later refined by Sakel of Vienna and today used, in an experimental fashion, throughout the world.

The literature is as yet not extensive and might even be described as meager since much is but translations and paraphrases of Sakel's reports, while many other references when investigated prove to be editorial comments of a general nature or statements of current investigations which amount to little more than protocols.

Before proceeding to the history of the chronological development of this new therapeutic attack, brief comment may be made of the previous role of insulin in psychiatric practice. No sooner was insulin isolated in 1922 than physiologists began to investigate in detail its various physiological actions and possible usages in the non-diabetic patient. It was soon touted as a valuable aid in stimulating appetite and so was empirically used in the treatment of the undernourished patient, and later in the undernourished psychotic patient. As is so commonly the case with new therapies. it was soon ascertained that its applicability was limited and all too frequently a temporary gain in appetite and weight was followed by a weight loss, when the treatment was suspended, so that the net result was the same or an even poorer condition. In passing, a hypothesis is offered as to the reason insulin treatment of malnutrition in the psychotic patient, especially in the negativistic catatonic patient, is usually futile. This refusal of food we may assume is based not on an actual absence of physiological hunger, but rather upon a psychic denial of hunger. Certainly in such cases insulin could only augment a hunger which physiologically was already present.

Previous workers such as Benedek¹ have investigated the effect of insulin on mental functions, while Torp² in 1932 described the beneficial effect of hypoglycemic shock in a schizophrenic patient.

Torp, a Norwegian investigator, in 1930 in attempting to treat the malnutrition of a catatonic patient accidentally put the patient in in-

^{*}The Menninger Clinic.

sulin shock, which was undiscovered for some time. Her obvious improvement following this so impressed him that he reported the case.

Munn³ in 1935 in the insulin treatment of malnutrition in catatonic stupor was unimpressed with the results but commented as follows: "It is of interest that during moderate severe insulin shock the catatonia entirely disappeared and she talked freely and moved about easily for an hour, just as some catatonic patients do under the influence of sodium amytal."

Sakel had already published his first results at this time but it appears that Munn was unaware of them.

It was in 1930 that Sakel⁴ began to use large doses of insulin to combat the withdrawal symptoms seen in morphine addictions and in November 1933 he, by analogy, used it for its sedative effect in schizophrenia.

Sakel⁴ used insulin in combating the withdrawal effects of morphine in addicts since he felt that their disturbed state was due to increased adrenalin action and insulin was used for its antagonistic effect. He had found he could safely use large doses in addicts and tried the same in psychotics.

At the start any type of schizophrenia was subjected to the treatment, regardless of the duration of the disease but at present, probably due to the greater incidence of success in early cases, the latter are preferred.

In Vienna all diagnoses are made or confirmed by Professor Pötzl who has stated that he believes that the Viennese concept of schizophrenia is based more on the teachings of Kraepelin than those of Bleuler and hence narrower, being more of the nature of what Kraepelin called dementia praecox. Wilson⁵ states that Bleuler's concept includes much that is elsewhere called amentia, amentia meaning on the continent, a confusional state.

TECHNIQUE

The technique of the treatment is as follows, and represents the latest available information regarding it since many changes have occurred in the past three years. However, at the start it must be stressed that Sakel, and all his co-workers both here and abroad continually reiterate that the duration and intensity of each phase is strictly graduated in accordance with the requirements of the individual case. Thus the scheme of the four phases of the treatment is but an elastic outline of the suggested treatment.

Phase I consists of twelve to twenty units of insulin dependent on the body weight and general physical status of the patient. This is given at 7 a.m. to the fasting patient. Four or five hours later 150-200 grams of sugar are given and later the regular mid-day meal. The rest of the day follows the ordinary hospital routine. In case of marked excitement another injection of the same dose of insulin is given at 2 p. m. and neutralizing carbohydrates two hours later. This initial dose is increased by five to ten units daily, six days a week. As soon as hypoglycemic manifestations begin to appear such as profuse sweating, with large drops, siliaorrhea of a viscid type, tremor and yawning, the patient is ready to pass into Phase II. If the hypoglycemic reactions appear suddenly and severely it may be associated with clonic twitchings of the extremities, shoulder girdle and face. Subjectively the patient experiences either a sedative calm and warmth or restlessness and chilling, slight paraesthesias of the finger tips, palms and about the mouth. Occasionally patients complain of cardiac anxiety and oppression, palpitation and diplopia. The point at which these symptoms begin to appear, i.e., calm, warmth, or restlessness with chilling and paraesthesias marks the theoretical threshold of the shock stage or Phase II. However, the patient may pass immediately into coma, or even an epileptic seizure with even a small dose while in one case 240 units failed to elicit any physical or mental signs of shock.

Sakel believes that old cases are more resistive to the influence of insulin than recent cases and even claims to be able to judge the duration of the schizophrenic state from the patient's responsiveness. Müller⁶ strongly denies this susceptibility based on duration of the disease.

However, despite the appearance or non-appearance of the hypoglycemic symptoms, appropriate carbohydrate must always be given four to five hours after insulin administration.

Sakel assumes Phase II to be in progress when the degree of coma is such that voluntary feeding is no longer possible and nasal feeding must be instituted, or regardless of the coma, when a convulsive seizure threatens or occurs.

The more common, and desired shock or coma is "wet-shock" so called because of the excessive perspiration. The convulsive seizure is believed by Sakel to be most common in the cases showing few signs of the hypoglycemia until the seizure supervenes. It is at this phase that the physician must be ready to immedi-

ately terminate the shock by adrenalin intramuscularly and glucose either by nasal tube or intravenously.

As uncomplicated coma occurs normal deep tendon reflexes are abolished and pathological reflexes occur, the Babinski, Oppenheim, etc., later all reflexes are lost. Occasionally a transitory hemiplegia develops, always on the dominant side. Other signs are pallor, tachycardia or bradycardia, fluctuations in blood pressure, disturbances in respiration, marked twitchings, coarse clonic movements, sometimes tonic attitudes and movements reminiscent of the behavior of the decerebrated animal. Glueck believes that these movements represent an acting out of tendencies which seem to have a distinct bearing on the content of the patient's psychosis.

The most difficult point in the entire treatment is the determination of the length of time the uncomplicated coma is allowed to continue. Sakel believes this should continue until four or five hours have elapsed following the administration of the insulin.

If glucose is administered by nasal tube the patient awakens in five to thirty minutes, and immediately if intravenous glucose is given. In the latter case additional glucose is always given by the nasal tube.

Again, the number of shocks is entirely dependent on the individual case. Forty to fifty shocks are not uncommon before the case is considered to have received maximal benefit or treatment is considered to be of no avail.

In an as yet unpublished paper of Sakel's referred to by Glueck, Sakel has attempted to formulate separate managements of the three types of schizophrenia he recognizes, namely, the paranoid, catatonic and catatonic excitement. Sakel's hypothesis is that the hypoglycemic state inhibits the momentarily most active part of the psyche and thus makes possible the emergence of the latent aspect thereof. In other words, before coma is reached, the hypoglycemia has inhibited and delimited the existing psychotic state and converts it into its opposite. In many cases, if not all, Sakel believes he has been able to observe a brief period of complete lucidity in the hallucinated and delusional patient just prior to the onset of the deep coma. This same patient after repeated shocks and improvement, will have progressively longer periods of lucidity in the non-hypoglycemic state and will become acutely psychotic again for a brief period before going into coma. He calls this the activatedpsychosis. Sakel believes there is a tendency for fixation of the state of the psyche at the time hypoglycemia is interrupted and so whenever possible tries to administer glucose at this optimum time. Of course cardiovascular collapse, convulsive seizures and the like call for immediate intervention regardless of the mental state of the patient at that instant.

The practical application of this concept is as follows: The predominantly paranoid cases are allowed to pass into coma which is then terminated after an elapsed time of four or five hours, in the ideal case passing through a lucid state prior to the onset of coma.

The predominantly stuporous patient is closely watched so that if in the pre-coma stage he becomes activated, so that he has changed from a non-productive to a productive psychotic state the treatment is halted at this point. When this productive stage has been at least temporarily fixated the patient is then treated with deep shock as in the paranoid type.

In the paranoid type all external stimuli are eliminated so far as possible while in the stuporous patient every effort is made to arouse the patient during the hypoglycemic state.

In respect to the patients with catatonic excitement, Sakel became quite pessimistic as to the efficacy of his therapy. These patients he treats by starting with doses of fifteen to twenty units t.i.d. which are increased by five to ten units daily. When the patient remains quiet in treatment the insulin is given but once daily. At the beginning of treatment food is used to overcome the resulting hypoglycemia but later sugar is used. Once shock dosage is reached interruption is aimed at the moment maximum somnolescence is reached just prior to deep coma. Coma is avoided but if the patient cannot drink the sugar solution it has been found that passage of the nasal tube is quite disturbing to the patient so coma to a degree sufficient to pass the nasal tube is then permitted to ensue.

Phase III. This phase is merely a rest day, usually every seventh and for convenience sake is usually Sunday. Phase III does not continue into Phase IV unless maximal benefits are believed to have occurred, or treatment is to be abandoned. An extra day of rest is usually given following undue occurrences such as seizures and the like. Phase IV is a period of stabilization or polarization and Sakel believes that during this period the improvement is reinforced and made more permanent. Much smaller doses of insulin, usually ten to thirty

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units are given daily followed by carbohydrates no later than two hours.

Some of the various reactions observed in Phase II are the following: Sweating is usually seen, and profuse sweating is considered a favorable sign. Hunger may be complained of, one patient eating bits of newspaper. Occasionally a "hunger riot" reaction occurs in which the patient becomes very excited and shouts for food in which case it is always given.

It is of interest that the bradycardia seen so frequently in Vienna was not found in Müller's cases in Switzerland. While in Vienna tachycardia was observed at the onset of the hypoglycemic reaction, bradycardia almost invariably followed, a pulse rate below forty being considered indication for termination of shock. Müller noticed persistent tachycardia in most cases with bradycardia seen less often. Whether this be due to the insulin, since according to Wilson a Swiss insulin (Sandoz) is used by Müller while Sakel uses a Danish product (Novo), or whether it be due to other factors, has yet to be explained.

Blood pressure usually rises with a slight

drop in the diastolic reading.

Hadorn (a co-worker quoted by Müller) was able to demonstrate electrocardiographic changes during shock which however were always reversible and so no direct evidence of cardiac damage could be demonstrated.

Blood sugar determinations were found by both investigators (Sakel and Müller) to have little correlation with the clinical condition of the patient. While a drop of blood sugar level to sixty mg. is believed essential to the appearance of a clinical reaction, it by no means always occurs since patients were observed who showed no reactions despite the fact that the blood sugar level had dropped to thirty mg. per one hundred cc. Furthermore the deepest stage of insulin shock does not necessarily correspond to the lowest blood sugar level. On the contrary the blood sugar level has been observed to begin to spontaneously rise at this point.

Müller⁶ believes that a large part of the hypoglycemic symptoms are not due to the hypoglycemia per se but to the reaction to it, that is, the compensatory secretion of adrenalin. According to Kugleman, a co-worker of Müller, the pounding of the heart, tremor and sense of oppression are adrenalin symptoms whereas the weakness and sweating are the direct result of the hypoglycemia. Epileptiform seizures were much more commonly ob-

served by Müller than by Sakel. Müller⁶ observed forty-nine such attacks in a group of sixteen patients. Five patients had but one attack and some had as many as nine. Here again is a difference as yet unexplained.

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INFREQUENT COMPLICATIONS

The various other complications include: (1) after-shock, occurring many hours after awakening, one of which eventuated in death in Vienna but recovery in Müller's case; (2) vascular collapse; (3) laryngeal spasm with cyanosis and stridor, which if it continues means coma must be terminated; (4) respiratory disturbances, such as Cheyne-Stokes breathing which if associated with other signs may be taken as an indication for interruption; (5) low temperatures are associated with both dry and wet shock and persist for some time after coma is terminated. Some times the temperatures have been so low that special thermometers were necessary, according to Wilson⁵ quoting Georgi altho Gross's8 investigations have led him to state that the usual drop is but one degree C. and is corrected as soon as carbohydrate is ingested.

Most patients have an amnesia for the period of shock, others remember it as unpleasant, others have little discernible feeling regarding it.

Müller also disagrees with Sakel in regard to the relation of dosage and duration of the disease and the disagreement is complete since Wilson⁵ quotes Müller as follows: "We have quite new cases who need one hundred to one hundred twenty units before they react and old cases who react with twenty units." However, the average shock dose is sixty to eighty units. In some cases a sensitization occurs; whether due to true sensitization which seems unlikely or to an alteration in the self regulatory mechanism of adrenalin discharge is unknown.

Failure of shock has occurred in some cases and explanations are wanting. A particular batch of insulin may be defective or, as was the case in one instance, the patient had secreted sugar in the toes of his socks.

Still another complication was found to be vomiting while in coma with the attendant danger of aspiration pneumonia. For this reason Sakel uses back rests, and has the nurse turn the head of the patient to one side if vomiting occurs.

Three deaths have been reported, all from Vienna and all occurring early in the history of this treatment. One was a man of twenty-five,

who after shock progressed to the point of status epilepticus and death. Post mortem revealed cerebral hyperemia, bronchitis, lobular pneumonia, visceral hyperemia and a dilated heart. The second death in a man of thirty-six, was a sudden cardiac death following deep shock and post mortem revealed a thrombosis of the right coronary artery with surrounding areas of myomalacia in the ventricular wall.

The third death occurred in a woman of twenty-four; deep wet shock was followed by cardio-respiratory collapse and the patient after a febrile, unconscious course for four days died. Post mortem revealed acute pancreatic necrosis, broncho-pneumonia and a phlegmon of the tongue.

No other deaths have been reported so far as could be ascertained by this survey.

RESULTS

The most comprehensive list of results are those given by Müller⁹ in November 1936 comprising 300 cases from both Vienna and Switzerland. Unfortunately these results are not reported in detail by the Paris correspondent of the Journal of the American Medical Association. Müller divided the cases into three groups dependent on the duration of the illness. In Group I of less than six months duration 89.8 per cent were reported as improved and seventy-three per cent completely cured. Group II of six to eighteen months duration eightytwo per cent were reported improved and fifty per cent completely cured. Group III of eighteen months or over in duration reported forty-five per cent improved and one-half per cent completely cured.

Wilson⁵ assembled data in July of 1936 based on an examination of all statistics in regard to natural remissions and decided that the average for all cases was twenty to thirty per cent, with acute cases rising over fifty per cent and old ones to ten per cent.

Work in this country with insulin shock therapy is still in an early stage. It is assumed that a number of papers on the subject will be given at the coming convention of the American Psychiatric Association.

Steinfield of Peoria¹⁰ has reported four cases in which three gave a favorable outcome.

Wortis¹¹ reports that their results in the insulin ward at Bellevue are considered positive and states a detailed report will be given before the convention of the American Psychiatric Association.

At Colorado State Psychopathic Hospital

Ebaugh¹² and his associates have treated seven cases and begun treatment on eight more. Results are considered sufficiently promising to warrant continuation of this therapy for at least two years to properly evaluate it.

Keller¹³ of Seattle, Washington has treated twelve cases and is quite enthusiastic. All but one case improved physically. Three women showed complete remissions and three marked improvement. One man showed complete remission, and two men that were mute now talk and one did not respond in any way.

THEORETICAL CONSIDERATIONS

Sakel, according to Glueck adheres strictly to a biochemical hypothesis which he endeavors to sum up in the following three propositions:

- "1. The insulin puts a barrier between the cell and external stimuli, thus putting the cell at rest and enabling it to recuperate. He assumes that by keeping the pathologically conditioned cell-pathways in abeyance the original, normally conditioned pathways have a chance to reestablish themselves.
- 2. The profound, almost annihilating assault which the cell experiences during the insulin shock perhaps actually eliminates the recently established pathological pathways and in the course of recovery from shock, only the older, well-established, pre-psychotic pathways become reanimated.
- 3. A general detoxication of the entire organism occurs through the effect of the insulin on the entire metabolic status."

Glueck⁷ has convinced himself, "that although the therapeutic approach is essentially of a biochemical nature, its effects insofar as they lead to a modification of psychopathological states can in no way be looked upon as identical with those characteristics of a strictly causal therapy, such, for instance, as the psychoanalytic therapy of a hysterical phobia. On the contrary, one gains the impression of a radical and fairly rapid generalized disturbance of the vegetative, neurological and psychic integration of the patient which calls forth in its turn a rapid re-integration immediately upon the neutralization of the hypoglycemia. But in addition to the important role which the sugar metabolism plays in this catabolic and anabolic process psychic factors seem also to be of considerable importance."

Glueck mentions illustrative cases on this point as for example a morose, angry, negativistic and suspicious paranoid schizophrenic woman who shunned all contact with others.

During one of her earliest hypoglycemic states Glueck observed her hilariously excited, laughing and shouting, throwing herself about in her bed, exposing herself and calling for champagne. On awakening she had a total amnesia but was much less negativistic and more approachable.

Glueck is inclined to the belief that the repeated insulin shocks may serve to clear the atmosphere, so to speak, of the neurotic and psychotic state, especially in view of the fact that these experiences of acting out are followed by an amnesia and thus escape ego and super-ego critique with its subsequent guilt and shame.

After interviewing a fairly large number of recovered patients Glueck got the impression that they could be divided into two groups, the first one with a distinct emphasis on the virtues of repression, and an attitude that the past was best buried, while the second group had a definite preference for the so-called working through and reintegration.

If such be true a study of the tendency to relapse in these two groups would certainly be of great interest.

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A review of the enrollment blanks of the medical schools of the United States discloses the fact that the 1936-1937 freshman class is by far the smallest in numbers of any freshman class for many years, 5906. This number will be even smaller when the reports on students who have completed the year or who attended long enough to be counted as having been members of the class are received at the end of the academic year.-The Journal of the Association of American Medical Colleges, March 1937.

As houses well stored with provisions are likely to be full of mice, so the bodies of those that eat much are full of diseases.-Diogenes.

ACUTE ABDOMINAL DISEASE*

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A large variety of conditions are included in acute abdominal disease, but I shall attempt to consider only a few of the more common ones. Any consideration of the type of abdominal disease which may require emergency treatment should include appendicitis; otherwise, no argument might occur in the discussion. Many of us have already formulated our ideas regarding the management of most acute abdominal conditions; at least, one may say that it is difficult to find a surgeon who will not willingly confess that he really believes he knows the best method for the care of acute appendicitis and its complications. I am here, I suppose, to make my confession along with the others. It is my aim to consider briefly acute appendicitis, acute intestinal obstruction, perforated peptic ulcer, acute disease of the gallbladder, and acute pancreatitis.

APPENDICITIS

It is frequently said, and I have often made the statement that the acutely diseased unruptured appendix offers no great problem but that the difficult feat lies in the management of those cases in which the appendix has ruptured. My ideas have been changed regarding this point of view. The seriousness of a ruptured appendix cannot be overemphasized and I shall attempt later to consider this problem. It is sad but true that death occurs too frequently following the removal of unruptured acutely diseased appendices and, if one actually collects the statistics on this subject throughout the United States, it seems obvious that the death rate is too high. The statement has been made many times by older contemporary surgeons that an appendectomy may be one of the most difficult of abdominal operations. I concur in this as I have encountered many retrocecal unruptured gangrenous appendices that required a considerable amount of "something," call it skill if you like, in order to remove them without bringing about perforation. "Just an appendix," I have so often heard surgeons say in response to an inquiry regarding an operation.

Why is the mortality too high in appendicitis? Is it not because many of us have minimized the danger of the surgical procedure?

^{*}Read before the Kansas Medical Society, held in Topeka, Kansas,

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Within the past month a young physician came to me and said he was about to take the practice of a rural physician, that it was for this reason he had dropped in to spend a few days and learn to do some of the simpler types of operations, for example, appendectomy. It has been said that most of the deaths following removal of acute appendices are due to the fact that so many young and inexperienced men are performing the operations. Frankly, I think this is partly the answer. As a rule, there should be little or no risk in the removal of an acutely diseased appendix if the surgeon is well trained. The mortality may be only a few per cent if each surgeon reviews only his own statistics, but to the family in which a death occurs, the mortality is one hundred per cent. Catastrophies will occur but if the appendectomy is properly performed, the risk should be so small that every fatality would be looked on as a most unusual tragedy. Another reason why I think the mortality of appendectomy is too high is that the condition present often is not appendicitis. Generalized abdominal pain, diarrhea, and possibly vomiting may occur without being due to a diseased appendix. These symptoms may be referable to a type of enteritis which is frequently erroneously diagnosed as appendicitis. In such cases the mistake is discovered when the peritoneum is opened. There is marked reddening and congestion of all the parietal peritoneum, the small intestine and the colon. If only the appendix were removed under such circumstances, the patient might make a fairly satisfactory convalescence, but since the surgeon is somewhat chagrined at finding only a shriveled appendix in such cases, a careful abdominal exploration may be carried out, which will produce sufficient trauma to cause the acute infectious process in the intestinal tract to become generalized and a peritonitis may be precipitated. I cannot urge too strongly against abdominal exploration in this type of case. It is far better to remove a socalled chronic appendix without exploring, or simply to close the abdomen and admit error. Furthermore, it behooves all of us to cease minimizing the dangers incident to the removal of an acutely diseased appendix. There is grave danger if the procedure is not carried out by someone properly trained and, even then, there will be experiences that are far from pleasing.

RUPTURED APPENDIX

My opinion regarding the treatment of a ruptured appendix will most likely not meet

with the approval of all of you, but I can obtain better results if I treat the condition in the following manner. Let us consider first, those cases in which, according to the history and physical findings, the appendix has perforated only a few hours before the patient's admission to the hospital. The examination reveals generalized rigidity of the abdominal muscles, which is so marked that one frequently suspects the presence of a perforated peptic ulcer. Let us assume, however, that the diagnosis of perforated appendix is correct. In such cases, I make a right rectus or a McBurney incision and institute drainage by employing two Penrose cigarette drains, one of which is inserted upward toward Morrison's pouch and the other is directed into the pelvis. No attempt is made to visualize the appendix; there is no exploring whatever. Such patients may have rather severe pain before the operation, but according to my experience, the pain ceases soon after drainage is established. Some surgeon has said that it is impossible to drain the abdominal cavity. That may be true, but in a case of ruptured appendicitis in which pus is scattered throughout the abdomen and there is no attempt at localization of the process, drains properly placed will permit free discharge of pus for several days. Then, about the seventh postoperative day the drains may be gently loosened and shortened. They are usually removed on the twelfth postoperative day.

Now let us consider another type of perforated appendix. A typical attack has occurred and the pain has become localized in the right lower abdominal quadrant. A few hours (six to eight) before the patient's admission to the hospital the rather severe pain ceased suddenly, which indicated perforation. The physical examination reveals muscle spasm confined almost entirely to the right lower abdominal quadrant. In this type of case, I delay surgical intervention because I have found, from experience and from the review of many hundreds of histories of similar cases, that an operation is most likely to bring about a generalized process when all nature's efforts are being well mobilized to make the process a local one. Although it may be possible to remove such an appendix and have recovery ensue, my studies and observations show definitely that the risk is much higher if operation is performed immediately than it is if medical management is instituted and the operation is carried out later. If surgical intervention is undertaken at once, complications such as diffuse peritonitis and pelvic

and subphrenic abscesses develop far too often.

There is also the problem of the well localized appendiceal abscess. Drainage of such an abscess should be established after the body temperature has reached normal or nearly so.

It can be seen from the foregoing consideration that I do not remove the ruptured appendix immediately. Frequently, one hears the statement that if the appendix is easily accessible it may be well to remove it even though it is ruptured. In a large series of such cases which I have studied carefully the death rate was appallingly high following appendectomy. Death in many instances was due to subphrenic or subdiaphragmatic abscess and empyema. Does it not seem reasonable that removal of a perforated appendix would permit spread of the infectious process through the lymphatic structures? It is needless to state that an appendix which has perforated should ultimately be removed. I usually urge such a patient to return for appendectomy in two or three months.

As stated in the beginning, the plans which I have so briefly outlined may not meet with your approval, but the following table will show the results in 523 cases of all types of acute appendicitis in which I personally managed the condition according to the methods described (table 1).

Table 1
SUMMARY OF CASES OF APPENDICITIS

			Mor	tality Per
Type of appendicitis	Cases	Operation	Cases	cent
Acute, diffuse, purulent and gangrenous	437	Appendectomy with- out drainage	0;	0.0
Ruptured, localized abscess	38	Extraperitoneal drainage	3	7.7
Ruptured with diffuse and spreading peritonitis	48	Abdominal drainage	5	10.4
Total	523		8	1.52

‡One patient died twelve days after operation from exacerbation of a cerebral condition of long standing. The abdomen was clean.

I am pleased to say that in cases of perforated appendicitis my mortality at present is somewhat lower than the figures in this table and I attribute this decrease largely to the use of an anaerobic serum which was originally suggested by Weinberg, of the Pasteur Institute. Sufficient time has not elapsed to say positively that it is of great value but Priestley and I have employed it in a large number of cases and we feel that it unquestionably is worth while. This serum is prepared by injecting various strains of anaerobic organisms into horses. The use of such a serum is suggested largely on the supposition that many

anaerobic bacteria are perhaps more pathogenic than they were formerly supposed to be. In giving this serum, the patient is first desensitized; then twenty c.c. of the serum in 200 to 500 c.c. of physiologic saline solution is administered intravenously. Use of the serum may be repeated two or three times in each twenty-four hours.

ACUTE INTESTINAL OBSTRUCTION

This condition still continues to carry an extremely high mortality. However, I do believe that during the past decade there has been definite progress in the management of acute intestinal occlusion for we know more about the changes which occur in the chemical composition of the blood, and treatment is started earlier than it was formerly. For many years it was believed that acidosis was responsible for the death of the patient who had an acute intestinal obstruction; it is now realized that the most marked change in the chemical composition of the blood is an alkalosis.

I believe that intranasal suction, particularly the type suggested by Wangensteen, is the most worth-while maneuver yet devised for the preoperative management of such patients. I have seen some patients, apparently dying, in whom decompression by nasal siphonage obviously saved life. If one has difficulty in passing the tube, the maneuver may be accomplished rather easily by placing the patient on his right side and allowing him to have frequent sips of water while the tube is being inserted. Roentgenologic examination of the abdomen while the patient is in a sitting position will show whether or not the tube has entered the duodenum. It must also be remembered that patients lose an enormous amount of fluid by use of a suction apparatus and the fluid balance therefore must be compensated by intravenous and subcutaneous administration of fluids. As a rule, such patients should receive from 3000 to 4000 c.c. of fluid in twenty-four hours. Coller has pointed out that the most preferable solution is five per cent solution of dextrose. This solution is nearly isotonic and furnishes the patient with both food and water. Physiologic saline solution combats the toxicity of intestinal obstruction to a considerable extent and should be used, but one must remember that it is possible to administer an oversupply of salt and thereby defeat the purpose because, if the chloride content of the blood plasma is raised high above the normal level, fluid from the tissues is drawn into the circulation and dehydration is increased. Whenever possible, in such cases, the chemical composition of the blood should be studied. In my opinion, intranasal suction accomplishes two things: first, it is a great aid in preparing the patient for operation if surgical intervention becomes necessary; second, I have found that in many cases, after complete decompression has been brought about, the obstructed segment becomes freed and an operation is unnecessary.

Finally, I should like to warn of the possibility of closed loop intestinal obstruction. For example, I have seen three or four cases in which there was no clinical evidence of intestinal obstruction but necropsy disclosed that a segment of bowel, which was only eight to ten inches (20.3 to 25.4 cm.) in length had been caught in a mat of adhesions in such manner as to occlude it proximally and distally and form a closed loop. The blood supply to the obstructed segment was not impaired. An enterostomy or an entero-anastomosis had been made proximally so that the intestine was functioning normally and yet the patients apparently succumbed to an uncontrollable imbalance in the composition of the blood, which was characterized by an alkalosis. If therefore, one has a case of intestinal obstruction in which the occlusion has apparently been relieved and in which the chemical composition of the blood does not return to normal, exploratory laparotomy is strongly urged because, in my experience, an occluded loop may be found to be the cause of the trouble.

I feel that in cases in which acute intestinal obstruction has been present only a few hours, the condition may be rectified without great risk. If, however, the process has been present for many hours or several days, duodenal siphonage should be instituted and intravenous therapy begun. If this treatment produces marked improvement, the tube may be clamped off in order to determine whether or not the obstruction has been released. If it has not, surgical intervention should be carried out. Roentgenologic examination of the abdomen is always of importance in determining the situation of the occluded segment of intestine.

Intravenous therapy is the most important adjunct in supplying liquids to patients who have intestinal obstruction. As emphasized previously, care should be taken not to administer an oversupply of chlorides and the solution should be given slowly; usually, the administration of one liter of fluid should require two hours.

PERFORATED PEPTIC ULCER

The management of perforated peptic ulcer is of course a surgical problem. There is some difference in the views regarding the surgical procedure of choice, some surgeons believing that the ulcerated intestine should be excised and closure established by gasteroduodenostomy, others maintaining that the perforation should be closed and gastro-enterostomy performed. In making a decision, the length of time that has elapsed since the perforation occurred is of course important. If exploration can be carried out within an hour or two following perforation. I have no doubt that either of these procedures might be employed with a comparatively low mortality. However, one rarely has an opportunity to care for a patient so soon after perforation of an ulcer: therefore, it has been my plan in almost one hundred per cent of such cases only to close the perforation. Over it, I usually suture omentum. and when this is not easily available, I divide the suspensory ligament of the liver and use one end of it as a patch over the anterior surface of the duodenum. About thirty per cent of the patients with perforated peptic ulcer who have come under my observation have given no history of previous digestive disturbance whatsoever. More than half of the patients on whom I have operated had been imbibing freely of alcoholic beverages at the time of the catastrophe. The alcohol that is ingested may be an aid in rendering the gastric contents sterile.

One of the patients was admitted to my service sixty-four hours after perforation of a duodenal ulcer, and recovered following closure of the perforation under local anesthesia. I think it can safely be said that the surgical risk is decidedly high in all cases in which surgical attention has not been given within eight hours after perforation of the peptic ulcer. If only two or three hours have elapsed since perforation, closure without abdominal drainage may be considered. If there is an appreciable quantity of gastric contents (particles of food) in the peritoneal cavity, drainage seems advisable. When I employ drainage, a small stab wound is made in the lower middle portion of the abdomen, midway between the symphysis pubis and the umbilicus, and a soft rubber tissue drain is then placed with the proximal end so situated as to afford pelvic drainage. I think that abscesses in this region are more frequent following this catastrophe than they are generally supposed to be. The drains should not be disturbed for seven to ten days,

after which they are removed gradually.

A few years ago statistics on emergency surgery in one of the large eastern hospitals showed that the mortality following simple closure of perforated peptic ulcers was markedly increased if enemas were given within one week after the operation. I most certainly concur in that statement. I do not know who should be discredited for having been the first to recommend the use of enemas within the first few days following abdominal operations, but I do know that it is a procedure commonly practiced. careful review of hospital records showing the postoperative course of surgical patients will in many instances surprisingly reveal that the complications began on the second and third day after operation and following administration of a barrage of enemas. Study of postoperative hospital charts has revealed that serious difficulty may have its beginning with a series of enemas ranging in type from a soapsuds enema to a more "palatable" variety of milk and molasses. Patients complain of gas pains and enemas are given. Perhaps most of the patients will be able to withstand the treatment, but more often than is supposed, the patient will become nauseated and vomit; this may continue for two or three days. The temperature becomes elevated, the pulse is rapid, and there is definite sign of shock. I have observed this picture far too often. There seems little doubt but that peritonitis can be precipitated by such a procedure, especially if the ambitious nurse decides a "high enema" is in order. On my service, enemas are not included either in the immediate preoperative regimen or in the postoperative treatment. If abdominal discomfort ("gas pains") occurs and is not relieved by a rectal tube, hot compresses are applied to the abdomen and two or three ounces (sixty or ninety c.c.) of warm mineral oil or olive oil are gently instilled into the rectum and the patient is asked to retain it for four or five hours. The results are satisfactory and the colon has not been distended by a large quantity of water. I have reached the conclusion that an enema given on the third or fourth day postoperatively is comparable to the administration of a cathartic during an attack of appendicitis.

ACUTE DISEASE OF THE GALLBLADDER

Twenty-five years ago, the problem with regard to disease of the gallbladder was whether to drain or to remove the gallbladder. And in acute conditions of the gallbladder there is still considerable discussion as to whether a cholecy-

stectomy or a cholecystostomy should be carried out or whether operation should be postponed. Those who believe that an acutely diseased gallbladder should be removed argue that the condition deserves the same type of surgical management as does an acutely inflamed appendix. In a recent symposium on the subject there was a report of one hundred cases of acute cholecystic disease in which cholecystectomy had been performed. There were ten deaths. A mortality of ten per cent seems high—much higher than it might have been had the attack been allowed to subside before subjecting the patients to operation. Whether or not an acutely diseased gallbladder should be removed is perhaps a problem that should be solved by each individual surgeon. It is my opinion that cholecystectomy should be deferred for two to three weeks following an acute attack. casionally, tenderness of a localized character persists after cholecystic disease of an acute nature and the body temperature remains elevated to 103 degrees or 104 degrees F. In this type of case, I prefer to perform cholecystostomy and remove any stones that may be present. This can be carried out easily by the use of local anesthesia and with comparatively little risk. My reason for favoring delayed operation and occasionally cholecystostomy instead of cholecystectomy is that the risk of injuring the common bile duct because of surrounding edema is enhanced during the acute stage of the disease. Certainly, the procedure is more difficult than is the removal of a chronically diseased gallbladder.

The cause of pain in disease of the gallbladder has been shown recently by McGowan to be due in a large majority of cases to distention of the common bile duct resulting from spasm of the sphincter of Oddi. He showed that when an opaque substance was injected into the common bile duct through a T-tube the material would be retained in the common bile duct if morphine had recently been administered. It therefore seems paradoxical that morphine should be employed during the acute phase of a gallbladder colic. In small doses it often will be found actually to increase the patient's discomfort. The reason relief is obtained from the use of morphine in some cases is that a dose sufficiently large to impair the higher centers is administered. If glyceryl trinitrate is administered or if amyl nitrate is inhaled, the sphincter of Oddi usually relaxes al-

PRESIDENT'S PAGE

To the Members of The Kansas Medical Society:

The committee set-up for 1937 to 1938 has recently been completed and appears in this issue of The Journal. This has been a job, not because of the dearth of material but because of its abundance.

I have felt for years the more men to have definite responsibilities in an organization as large as our state Society, the better for the Society. In accordance with these convictions I have not asked any of the officers of the Society, including members of the Council, to serve on any committee, as they already have fixed duties and responsibilities. Furthermore, I have not asked any member to serve on more than one committee, regardless of the fact that most faithful and efficient work has been done by men working on several committees. In carrying out this plan it has been necessary to change the personnel on a number of committees.

Several new committees have been formed on advice of the Council. One of these is the Committee on Endowment, which may develop into an important position, and I feel that it has been manned with members who can develop its possibilities. Another new committee is that on border line groups, and it certainly will have important and interesting facts to study. Finally a committee has been appointed on the Conservation of Eyesight. This committee has been requested by different members and should have constructive possibilities in view of the Social Security Act.

After many years service in the state, I have developed a personal affection for many and a high esteem for every member of the state Society. The Society has progressed to where it is a privilege and an honor as well as sometimes a duty to become a member of a committee. The continued high standing of the Society is dependent upon the efficiency with which the committees function, and I hope that each member who has received an appointment will accept his task and devote his energies to the job ahead.

J. E. Gsell, M.D., President.

EDITORIAL

THE DOCTOR AND PUBLIC OPINION*

"The trend of the times indicates, I think, that the future direction of our civilization will be determined by public opinion. If that be so, then the doctor needs public opinion as much as public opinion needs a doctor.

That conviction alone would warrant the acceptance of the honor of your hospitality. There was, however, a more compelling reason. After twenty-five years' observation and study of peoples abroad and at home, during periods of prosperity, war, depression and revolution, I have been convinced that the preservation of what we cherish in our present civilization will be in direct proportion to the advancement of our knowledge of public opinion. As I look to science for leadership in this new field of research, I accepted the privilege of speaking here tonight.

For one hundred and thirty years your society held successful annual meetings without the necessity until recently, of considering the possible relationship between the doctor and public opinion. That is challenging but not surprising. The obvious explanation may be that times have changed but that would be an unsatisfactory generalization. The fact is, I think, that we are all aware of a new force in public affairs. That force, which we call public opinion, is changing the functions of our professions as it is altering the structure of our economic and social life. The trend of the times is toward the socialization of activities and the centralization of authority. Because we think that public opinion has some relation to that trend we want to know how we can influence it, in order to safeguard our own interests.

That may be the normal desire of any in-

dividual who feels the responsibility of citizenship. But it seems to me that the doctor and public opinion present a two-fold proposition. One is the imperative necessity of dealing with the external symptoms of public dissatisfaction with our present policies, practices and privileges. The second is the fundamental problem of shaping our civilization to fit the needs of mankind. Public opinion is related to both.

Last month at the annual dinner of the Cornell University Medical College Alumni Association, Dr. Floyd S. Winslow, your president, said:

'We have witnessed a striking revolution in the thinking of civilized mankind in the last generation.'

If we accept this as a statement of fact, and I think we should do so, is it not a challenge to the character and trend of scientific research? Can any physician cite an instance where any foundation, society or institution has made a coordinated scientific approach to the study of that revolution in its relation to medicine and public health? Is the thinking of civilized mankind worthy of only casual observation when it is determining the basic relationships between the doctor, his patients and society, when it is determining the direction of our whole civilization?

It has been my good fortune to study public opinion in thirty-four foreign countries and in as many states in the United States. The cumulative effect of this experience may be expressed in the statement that history today is being made in the realm of public thought. Wherever the thinking of civilized mankind becomes a fixed state of mind, where it can be controlled by dictators or dominated by militant minorities, there is more or less complete socialization of activity and centralization of authority. If we wish to escape that situation in the United States it seems to me that we must concern ourselves with the causes as well as with the manifestations and their impact on our individual spheres of life.

In a lecture at the University College of

^{*(}Address of Dean Carl W. Ackerman of the Graduate School of Journalism of Columbia University at the 131st annual meeting of the Medical Society of the State of New York at Rochester, New York, Tuesday, May 25, 1937 at 7 p. m.)

Wales a few months ago, Professor E. H. Carr said:

'The intellectual has an immense role to fill as the leader of public opinion. But in order to lead it, he must keep in touch with it. The political thinking of the intellectual once it divorces itself from the political thinking of the man in the street, is sterile.'

The relationship between Professor Carr's observation and Dr. Winslow's important statement will be clearer, I think, if we eradicate from our minds the fixed notion of so many professional men that publicity and public opinion are synonymous. We are not concerned here with the desirability or the technique of obtaining favorable publicity for intellectual leaders, whether they be physicians, educators or scientists. Our chief concern, it seems to me, should be with the causes of the divisions of public opinion which separate mankind into suspicious or hostile groups.

To achieve this objective there must be a transition from casual observation to scientific study.

Public demand for socialized medicine and the legislative and administrative encroachments on the physician's hitherto accepted rights are symptoms, not the cause of the prevailing opinion of mankind. While it may be necessary for you in self-defense to augment your public activities to deal with these symptoms you cannot, in my opinion, correct the fundamental causes until you begin to study and understand them. This involves, I think, a new type of scientific research.

May I suggest for your consideration the possibility of two fundamental causes: (1) the isolation of science from the thinking of mankind, and (2) the yielding of discipline to political authority.

During the life time of your society your members have observed literally stupendous advances in medical education, research and hospitalization. Generosity, inspired by gratitude, has caused money to flow from private fortunes and public subscriptions into medical study and activity. Individuals and institu-

tions operating in the field of liberty, outside of governments, have established the highest professional and ethical standards in the history of civilization. But admitting all that private medicine and research have accomplished to alleviate suffering, to conquer diseases and to promote human welfare, there remains the inescapable reality that the trend of public thinking today is in the direction of state control of medicine.

In view of the public activities and services of your profession, in view of public interest in medical activities and discoveries, in view of the deservedly honored position of the physician in society and your vast institutional resources dedicated to the people, is it not a fact that the dominant thought of your profession is isolated from the current thinking of mankind in regard to the relation of the state to the practice, the organization and the development of medicine? Mass opinion reflected in governmental policies bears little resemblance to the opinions expressed in your medical journals.

In that situation you are not alone. It is equally true in industry. Scientific industrial research, with all of its accomplishments and benefits in industry and to our national economy, has been isolated from the thinking of the worker. Industry as well as medicine has concentrated brain power on materials and physical properties, on actions and reactions of matter in its relation to man, rather than to man in his relationship to the new world which science created for him. It would not be accurate to characterize all research as materialistic in content or intention. But the important aspect, it seems to me, is that the impact of science on the thought of mankind has been materialistic. I use this word not to deprecate scientific research, or to reflect upon the great achievements of science, but to establish a contrast between man and mankind as physical entities, and man and mankind as thinking and articulate entities.

Man is more than tissues and corpuscles, more than the operator of a machine or the master JUNE, 1937

of a job. He is a voice today, a voice which when mobilized with that of his fellow man, possesses power capable of changing environment and institutions. This situation should challenge scientific research.

Is it not possible that we need a new orientation in a portion of our scientific research? Suppose that a small segment of the whole were redirected to study man and mankind, not as sociological, psychological, physiological and economic entities alone but as thinking, vocal entities? We are face to face today with mankind suddenly aware of its power of questioning and of deciding colossal public problems within and outside of government. This would be a terrifying picture if regimentation by the state were the only alternative to the cleavage of public opinion. The intellectual dare not isolate himself from the thinking of mankind, nor can mankind obtain security and peace by disregarding the experience and knowledge of science.

The future of scientific research depends upon the freedom of mankind to think, to speak and to act. The corollary is equally true. The freedom of mankind depends upon the disciplined leadership of science.

Politics cannot stop the momentum of mass thought in any direction—to the right or to the left. Politicians can only yield. Science can and must lead. The hope for our civilization to escape the disastrous consequences of centralized authority and expression, is for science to endeavor to substitute the discipline of scientific knowledge for the opportunism of politics.

When I was writing George Eastman's biography I was impressed by his frequent reappraisal of his obligations and responsibilities. It was that attribute of his mind which made him such a stupendous factor in industry and education. Long before social welfare, job and old age security, shorter working hours and the use of leisure became political issues, he endeavored to solve them in the orbit of his contacts. He considered them a challenge to his own ingenuity and to the industrial order

under which he had been such a conspicuous beneficiary.

George Eastman symbolizes the need for more frequent reappraisals of our individual and group obligations and responsibilities. Our destiny at present is not being determined in our scientific laboratories. It is being decided by the thinking of civilized mankind.

What can we do about it?

To summarize permit me to submit two propositions:

First, that public opinion is the life of civilization. The thinking of mankind reflects an active state of mind. The flexibility of public opinion is our present safeguard against the extreme right and the radical left. It is imperative that we keep discussion alive and active in the United States. If public opinion ever becomes a fixed state of mind it will be both restrictive and ruthless.

Those of us who believe that medicine, or education, or journalism should not be controlled by the state; those who cherish professional or institutional liberty of study, expression and action, will have to recognize that an active state of public opinion demands active participation in the rough and tumble of public debate. This is an obligation and a responsibility which the trend of the times imposes on the privileged individuals who have been beneficiaries of the industrial age.

The second proposition is that the requirements of civilization demand more than convincing arguments from intellectual leaders on current problems. We need the services of a group of men and women, detached from their specialties, working outside of governments, exploring, organizing, coordinating and directing scientific research to shape our social order to fit man and mankind.

My first proposition may be likened to the emergency ward of a hospital. We have the right and the duty to diagnose and prescribe whenever public opinion is concerned with matters which we are competent to consider and which affect our professional life or death. My second proposition may be illustrated by a

research laboratory wherein the man, with tissues and corpuscles is considered as a thinking vocal entity, as a representative of articulate mankind possessing a power over civilization greater than that of the atom or the cosmic ray.

Science cannot preserve the status quo of our policies, practices and privileges, but it can save what is useful to shape civilization to future human needs. It may even save our democratic institutions and our liberties, upon which your profession as well as mine are so dependent. But as I observe the impatience of public opinion for quick results I realize the necessity for scientific leadership outside of the realm of politics. This is an heroic opportunity. Science can enlist the men and command the resources. Mankind, I think, will welcome and respect that leadership. And the doctor's need for public opinion will be balanced by the need of public opinion for a doctor.

CASE REPORT

TREATMENT OF A CASE OF UNDU-LANT FEVER WITH METAPHAN

BY A. J. REVELL, M.D.

Pittsburg, Kansas.

R. P., electrician by trade, came into our office on January 20, 1937, complaining of: (1) Severe night sweats, (2) Loss of weight, (3) Fever, (4) Weakness, (5) Muscular aches. Patient stated that in September, 1936, he had a series of chills and fever which lasted a week or ten days. The chills were irregular in appearance and temperature was as high as 103.4. Associated with the chills and fever were diffuse headache, muscular aches throughout the body, weakness and profuse night sweats. The patient thought he had malaria and took five grains of quinine twice a day for two weeks, which seemed to stop the chills but the other symptoms have persisted constantly until his coming to our office. He has lost twenty pounds in weight since the beginning of his illness. Regional history was negative except gastro-intestinal and respiratory systems. Milk is the only food which bothers him and forms gas. The first week of January. 1937, he had several loose clay colored stools. He stated that he is subject to many colds each year. Has a productive cough in the mornings. No history of hemoptysis.

Physical examination revealed a white male well developed, slightly undernourished, height sixty-eight inches, weight 134 pounds, temperature 100.3, pulse 100, B.P. 122/78. Head, Tonsils out, teeth and gums good; Chest, Negative; Abdomen, spleen palpable and tender. Skin and mucous membranes anemic. Rectal examination found prostate normal. Skin, bones, joints, neuro-muscular and glandular systems normal.

This patient was seen on four consecutive days and temperature and pulse were recorded as 100.3-100, 99.4-88, 101.2-108, 100.6-102.

Laboratory examinations: Kahn negative, Tuberculin test negative, prostatic smear rare pus cell, no bacteria, Widal negative. Urine was negative. Blood smear negative for plasmodia malaria. HG sixty-nine per cent. R. B.C. 4,100,000. W.B.C. 6,100. Polymorph. sixty-seven per cent, lymphocytes thirty-one per cent Eosinophiles two per cent. Agglutination test for Brucella Abortus positive in dilution of 1-10, negative in higher dilutions. Aggluination test for Bacillus Mellitensis completely positive in dilutions up to 1-200, partial in 1-250, and negative in higher dilutions.

Treatment was started on January 23, 1937. Temperature at this time was 100.6. Liver extract three c.c. was given intramuscularly and ten c.c. of 1:100 Metaphan intravenously and Ferrous Sulphate grain three was prescribed four times daily per os. The liver and Metaphan were repeated on January 26 and the temperature and pulse on this date were 99.4-88. On January 29 temperature was ninetyeight, pulse eighty and patient stated he felt better than he had since summer as his aching and sweats had disappeared. At this visit he was given liver alone and this repeated again on February 1; on February 3 patient returned complaining that his symptoms had reappeared. Temperature was found to be 100.6, pulse 110. Metaphan and liver were given and repeated on February 5, 8 and 11, although he was afebrile at these visits and was feeling fine. On February 20 a blood check up was done and report showed HG. ninety-two per cent, RBC. 5,000,000.

Patient returned for check up on March 26 and was feeling perfectly well and had been

symptom free since February 3.

Discussion: Ashworth and Pinckney¹ report the successful treatment of a case of undulant fever with vaccine and the intravenous injection of Metaphan. Regardless of the fact that undulant fever is considered as a self limiting disease, usually running its course in one to four months, and also realizing that agglutination in this case was present only in relatively high concentrations but, in view of the evidence that after the first two injections of Metaphan the symptoms abated only to return when the Metaphan was discontinued and disappeared entirely upon resumption of Metaphan therapy, we present this case report feeling that the Metaphan was responsible for the disappearance of the fever and the other symptoms. The secondary anemia responded well to liver extract and ferrous sulphate.

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TUBERCULOSIS ABSTRACTS

A review for physicians prepared monthly by the National Tuberculosis Association and published through the co-operation of the Kansas Tuberculosis and Health Association and The Kansas Medical Society.

PROGNOSTIC SIGNIFICANCE OF THE TUBERCULIN REACTION

Ninety-six cases of clinical tuberculosis were studied from 1925 to 1933. Reactions to the tuberculin test were minutely observed and the cases were classified as: (1) those where a strongly positive reaction was obtained; (2) those where a strongly positive reaction was not obtained. Observation of these cases six months later showed that fifty-five per cent of those who had not reacted strongly were prognostically bad, while only seventeen per cent of those who had reacted strongly were in a like condition. Of the former eighteen per cent had died, of the latter only four per cent.

In 1933 the survival rate for the whole group was fifty-three per cent, of the strongly positive group fifty-six per cent, of those not strongly positive forty-two per cent, or a spread of fourteen per cent in favor of the strongly positive group. Selecting only sputum positive cases from the whole group results were similar but with a lower differential, eight per cent.

Further evidence of the prognostic significance of the strongly positive reaction may be deduced from the fact that such pronounced reactions are usual in cases of extra-pulmonary surgical tuberculosis and that there is little tendency for these localized lesions to become generalized.

Again there may be cited the accepted vulnerability to tuberculosis found in the "virgin soil" of primitive races as illustrated by the severity of the disease among American Indians or in Professor Cummins' studies among the natives of South Africa. Dr. Cummins speaks of the "natural liability" to tuberculosis infection associated with "virgin soil" as a "dangerous defile at the very start of the road toward immunity."

It is a familiar experience to find a reduction in strength of the tuberculin test or its disappearance during the acute stage of a concurrent infectious disease. This fading away of the reaction may be evident in measles, typhoid, influenza, acute rheumatism, pneumonia, small-pox vaccination, chickenpox and whooping cough. Realizing the frequency with which some of these appear to stimulate tuberculous activity it is reasonable to suppose that the disappearance of the skin reaction represents an embarrassment of the organism in its struggle against an existing tuberculous infection.

Professor Heimbeck's experience and similar observations of Spehl and Thys in Brussels in the study of tuberculous morbidity among nurses are introduced as further indication of a certain prognostic significance to be drawn from variations in intensity of skin reactions in adults.

THE AUTHOR'S HYPOTHESIS OF THE SIG-NIFICANCE AND MEANING OF THE TUBERCULO-CUTANEOUS REACTIONS

Before drawing final conclusions from these and other observations the question of the mechanism of the tuberculin reaction itself confronts us. The following experiment of Calmette is illuminating. When tuberculin is introduced into the conjunctical sac of a nontuberculin subject no reaction takes place. If blood serum from an actively tuberculous patient is introduced similarly in another nontuberculous subject there is still no reaction. If, however, tuberculin be mixed in vitro with blood serum from a tuberculous patient and the tube kept for a given time at a given temperature and then injected into the conjunctival

sac of a known non-tuberculous subject, a prompt reaction takes place.

From this is may be concluded that: Tuberculin per se does not cause this reaction and serum from a tuberculosis patient does not cause it. There must, therefore, be a substance in the serum of the tuberculous patient which acts on the tuberculin to liberate something causing the toxic and irritant phenomena in the eye.

Living tubercle bacilli flourishing in a patient's body produce a substance resembling tuberculin. This comes in contact with the blood serum of the infected individual and the test tube experiment above described is repeated. The organism, as in other bacillary invasions, should now give a protective response. A substance appears in the serum which so acts on the tuberculin as to disintegrate it into (a) an irritant body producing toxic phenomena, and (b) some other unknown substance or substances. The author suggests the name "ergine" for this substance and assumes that the action of "ergine" on tuberculin is a stage in the elimination of tuberculin from the infected organism. Since constitutional and focal reactions terminate favorably in a large number of tuberculous cases, it is also reasonable to assume that the toxic body (a) is combated by the elaboration of some antitoxic factor which disposes of and eliminates the products of the action of the "ergine" on the tuberculin. Furthermore, it is again reasonable to assume that the more sensitive the organism is to tuberculin, i. e. the smaller the concentration of tuberculin required to give a response to "ergine," the more quickly will the tuberculin, collected or elaborated in that body, be disintegrated and disposed of.

Calmette found that if a guinea-pig, inoculated with living tubercle bacilli, was given gradually increasing doses of tuberculin (1) it became increasingly difficult to produce the reaction phenomena in the animals under treatment with tuberculin. However, such pigs always reacted to massive doses. (2) The serum of these treated animals contained nothing capable of neutralizing tuberculin in vitro, nor of passively immunizing other guinea-pigs against tuberculin. (3) The power of absorbing large doses of tuberculin without reaction was soon lost by the animals if the injections were sus-(4) The lesions of these animals did not tend to progress more slowly than the lesions of the infected but untreated animals,

but tended to progress more rapidly than in the controls.

CONCLUSION

There does not seem to be, at least in the quinea-pig, any relation between the power to absorb tuberculin without reaction and the power to successfully combat tuberculous infection, i. e., tuberculin per se is harmful even before the "ergine" has acted on it to produce toxic phenomena and further in the guinea-pig at least even more harmful than the "erginised" tuberculin.

The process of elimination of tuberculin consists of: (a) a response of "ergine" immediately followed by more or less reaction phenomena; (b) elimination at a varying rate of the results of the action of the "ergine." Organisms with quick and efficient "ergine" response dispose of their tuberculin piecemeal. obviating toxin saturation. Organisms with a slow or late "ergine" response permit the accumulation of tuberculin before "ergine" appears and functions with the resulting production of sudden large volumes of toxin.

One is now in a position to state the following hypothesis: Since toxin saturation of tissues is undesirable, since accumulation of tuberculin in the tissues is undesirable, and since the evolution and action of an "ergine" is an essential factor in the prevention of both, then acute sensitiveness to the presence of tuberculin in the tissues leading to "ergine" formation and action before large amounts of tuberculin have accumulated tends to facilitate the elimination of the latter and prevent toxin saturation of the tissues, i. e., sensitiveness to tuberculin is of advantage to the infected organism.

The power to give a strongly positive Von Pirquet reaction is direct evidence of such sensitiveness.

Prognostic Significance of the Von Pirquet Cutaneous Reaction in Adults, Wm. G. Watson, M.D., Ch.B., Tubercle, March, 1937.

"Infant mortality is the most sensitive index we possess of social welfare. If babies were all well born and well cared for, their mortality would be negligible. The infant death rate measures the intelligence, health and right living of fathers and mothers, the standard of morals and sanitation of communities and government, the efficacy of physicians, nurses, health officers and educators."—Ohio Health News.

We hope to grow old and yet we fear old age: that is, we are willing to live and afraid to die.—La Bruyere.

MEDICAL ECONOMICS

Edited by O. W. Davidson, M.D. of the Medical Economics Committee

House Bill No. 557, the Social Security Act, has been reproduced below for the information and study of Kansas physicians:

AN ACT setting up a state board of social welfare and county boards of social welfare; providing for the members of each, providing for the employment and control of the personnel of state boards, fixing compensation for each thereof; providing for state appeal committees and the procedure thereof; providing for the establishment of state and county social welfare funds and the disbursement thereof; and authorizing assistance to those over sixty-five years of age, and to the blind, and to dependent children; and other general welfare.

Be it enacted by the Legislature of the State of Kansas:

SECTION 1. Purposes of the act. It is hereby declared the purpose and policy of the state in assisting the counties, in aiding and supervising the directing of the welfare work therein, to provide an effective uniform system of welfare work for the state; to promote efficiency in the work; assist the counties in the financing of the welfare work; and to comply with the conditions provided for obtaining federal grants for welfare work as set forth in Public No. 271—74th Congress (H. R. 7260) or amendments thereof, and the rules and regulations of the federal social security board relating thereto. It is not the policy of the state to discourage or interfere with the universally recognized moral obligations of kindred to provide, when possible, for the support of dependent relatives, but rather it is the policy of the state to assist the needy and where necessary, the relatives in providing the necessary assistance for dependents.

SEC. 2. Definitions. The following words and phrases when used in this act shall, for the purposes of this act, have the meanings respectively ascribed to them in this section.

"State board" shall mean the state board of social welfare.

"County board" shall mean the county social welfare board.

"State director" shall mean the director of the state board of social welfare.

"County director" shall mean the officer designated by the county board to direct the welfare work in said county.

"Applicants" shall mean all persons who, as individuals, or in whose behalf requests shall be made of the county boards and private agencies for aid or assistance.

"Social welfare service" as used in this act shall be deemed to include giving assistance to needy persons, the prevention of public dependency, and promoting the rehabilitation of dependent persons or those who are approaching public dependency.

"Assistance" as used in this act shall be deemed to include the giving of money, food, clothing, shelter, medicine, or other materials, the giving of any service, including instructive or scientific, and the providing of institutional care, which may be necessary or helpful to the client in providing the necessities of life for himself

and his dependents: Provided, These definitions of social welfare service and assistance shall be deemed as partially descriptive and not limiting.

"County worker" shall mean those persons under the employ of the county and subject to the supervision of the county director to investigate each applicant's application for assistance and return written reports thereon.

"Appeal" shall mean the right of any applicant to have the decision of the county board upon his application for assistance reviewed by the state board.

"Procedure" shall mean those rules and proceedings provided by the state board whereby the county board, private agency, applicant or other interested person may bring a case before the state appeal committee and the orderly processes by which the state appeal committee shall hear the case, and reach its conclusion.

"Old-age assistance" shall mean money payments to needy individuals who are sixty-five years of age or older.

"Dependent children" means needy children under the age of 16, who have been deprived of parental support or care by reasons of the death, continued absence from the home, or physical or mental incapacity of a parent, and who are living with their father, mother, grandfather, grandmother, brother, sister, stepfather, stepmother, stepbrother, stepsister, uncle, or aunt, in a place of residence maintained by one or more of such relatives as his or their own home.

"The blind" shall mean not only those who are totally and permanently devoid of vision, but also those persons whose vision is so defective as to prevent the performance of ordinary activities for which eyesight is essential.

"Client" shall mean a member of a case certified for assistance by a county or private agency.

"Recipient" means a person who has received assistance under the terms of this act.

"Case" shall mean a unit of one or more dependent persons receiving assistance as such unit.

"Private agency" shall mean a private person, persons, corporation, or organization engaged regularly in the business of giving assistance, or furnishing shelter for hire

to needy persons.

"Intake office" shall mean the place where the county or private agency shall maintain an office for receiving applications.

SEC. 3. State board of social welfare. There is hereby created a state board of social welfare which shall be a body corporate with powers and duties hereinafter defined. The state board of social welfare shall consist of five members appointed by the governor. They shall be selected by and with the advice and consent of the senate, on the basis of recognized interest in and knowledge of social welfare and without reference to political or religious affiliations. The first appointments shall be made within ten (10) days after this act takes effect, and one member shall hold office to April 1, 1938, two to April 1, 1939, and one to April 1, 1940, and one to April 1, 1941, or until their successors have been appointed and qualified. All appointments of board members following the initial appointments shall be for terms of four (4) years. The members of the state board shall take their oath of office within ten days after such appointment, and within forty days after this act shall have taken effect the governor shall call the members of the state board together at which time they shall organize by selecting a chairman and a vice-chairman and secretary. The governor may remove a member of the state board for good cause. The members of the state board shall receive as their compensation ten dollars (\$10) per day for time necessary for them to perform their services, but not to exceed five hundred dollars (\$500) per year, and they shall be reimbursed for the amount of their necessary traveling and living expenses actually incurred while in the performance of their official duties. Any vacancy occurring in the membership of the board for any cause shall be filled by appointment by the governor for the unexpired term. No member of the board shall be eligible to hold any other public office during the term for which he or she is appointed to the board, and all members of the board are hereby declared ineligible to be a candidate for any elective office while a member of the board or for two years after retiring from the board.

SEC. 4. Creating a state appeal committee, and the hearing of appeals. There is hereby created within the state board a state appeal committee. The same shall consist of three members of the state board to be selected by the chairman. The same shall hear and determine all controversies arising between the state director and the county boards, and also shall provide a fair hearing for any person who is an applicant, client, other interested person, or taxpayer who appeals from the decision of any county board or private agency. The state board shall prescribe the procedure for hearing all appeals. It shall be the duty of any county board or private agency to have available in all its intake offices during all office hours, forms for filing complaints for hearings before the county board or private agency, and appeal forms with which to appeal from the decision of the county board or private agency to the state appeal committee, such forms to be prescribed by the state board: Provided, That there shall be printed on or as a part of such forms the basic rules and regulations for hearings and appeals as prescribed by state law and the state board. County boards and private agencies shall hear such complaints as are filed with them on the proper forms and shall transmit any appeals from their decisions to the state appeal committee in accordance with rules and regulations prescribed by the state board. Any one or more county boards or private agencies may appeal to the state appeal committee. The director shall have authority to order an investigation of the activities of any county board or private agency whenever he deems it necessary, or whenever the state board shall recommend an investigation. The state appeal committee shall have authority, when hearing appeals or conducting investigations as provided for in this section to subpoena witnesses, administer oaths, take testimony, and render decisions, copies of which decisions shall be delivered to the appellant and to the county board or private agency as the case may be, and any county board shall comply with such decision of the state appeal committee, and any private agency shall comply with such decision of the state appeal committee or be subject to the revocation of its license. The state board may affirm, modify, or set aside any decision of the appeal committee.

SEC. 5. The state director. The state director shall be appointed by the state board on the basis of recognized interest in and knowledge of social welfare and recognized ability as an executive officer in the field of social welfare. He shall hold office at the pleasure of the state board. His salary shall be set by the state board, but in no case to exceed four thousand five hundred dollars annually. The director shall be the executive and administrative officer of the state board. He shall appoint, employ, and remove the necessary agents and employees of the state board. He may appoint a deputy director by and with the con-

sent of the state board to whom he may assign the duties and powers of his office during his absence. The state director shall perform such other duties as may be required by said board.

SEC. 6. Meetings of the board. The state board of social welfare shall hold regular quarterly meetings, and such other meetings as the chairman of the board deems advisable. All meetings shall be held in the regular offices established and maintained at Topeka, Kansas.

SEC. 7. Bonds of directors, agents and employees. The director, and such agents and employees as required by the state board, shall give good and sufficient surety company bonds containing such conditions and in such amounts as the state board may require, and the premiums on such bonds shall be paid by the state board.

SEC. 8. Powers and duties of the state board. (a) The state board of social welfare shall have the power and it shall be its duty to develop' state plans, as provided for under the federal social security act, whereby the state cooperates with the federal government in its program of assisting the states financially in furnishing public assistance to the needy aged, the needy blind, and dependent children, and in furnishing child welfare services and other social welfare services within the state. The state board of social welfare shall undertake to cooperate with the federal government on any other federal program providing federal financial assistance in the field of social welfare not inconsistent with this act. (b) It shall have the power and it shall be its duty to determine the general policies relating to all forms of social welfare which are administered or supervised by it, and to make the rules and regulations therefor. No rule or regulation shall be adopted which will require partiality in the amount of public assistance to be given to the persons of this state having approximately equal need. (c) It shall prescribe the duties and compensation of the employees of the state board, and shall establish the standard of qualifications for the employees of the state and county boards, and shall advise the director, the governor, and the legislature on all social welfare matters covered in this act. (d) The state board shall supervise all social welfare activities of the county boards of social welfare, and rules and regulations made by the state board under the provisions of this act shall be binding upon the county boards. (e) The state board may conduct special inservice training for the state and county social welfare workers: Provided, The state board may assist state educational institutions in such training service. (f) The director, under the supervision and with the approval of the board of social welfare shall establish an adequate system of financial records. The board shall make annual reports to the governor and shall make such reports as shall be required by the federal social security board or other federal agencies. (g) The state board shall have power and authority to sponsor, operate, or supervise work projects for the construction, reconstruction, improvement, repair, and maintenance of any equipment used in the administration of state and county boards of social welfare. All work projects sponsored by the political subdivisions of the state and private agencies for the purpose of providing work by which clients may earn a part or all of their assistance shall be subject to the approval of the state board. (h) The state board may receive, have custody of, protect, administer, disburse, dispose of, and account for federal or private commodities, equipment, supplies and any kind of property, given, granted, loaned, or advanced to the state of Kansas for

social welfare works, and for any other purposes provided for by federal laws, rules and regulations, or by private devise, grant or loan, or from corporations organized to act as federal agencies, and to do such and all things and acts as may be necessary or required to perform the functions and carry out the provisions of federal laws, rules and regulations under which such commodities, equipment, supplies and other property may be given, granted, loaned, or advanced to the state of Kansas, and to act as any agent of the federal government when designated as such, and do and perform all things and acts that may be required by the federal laws, rules and regulations not inconsistent with the act; and the state board shall designate county boards or their employees as agents of the state board in the performance of any or all such matters within the county. (i) The state board may assist other departments, agencies and institutions of the state and federal governments and of other states under interstate agreements, when so requested, by performing services in conformity with the purposes of this act. (j)The state board shall have authority to lease real and personal property whenever such property is not available through the state or a political subdivision of the state, for carrying on the functions of the state board. (k) All contracts shall be made in the name of "the state board of social welfare of Kansas," and in such name the state board may sue and be sued on such contracts. (1) All funds and property of any kind whatsoever received from the Kansas emergency relief committee or from any other state department or political subdivision of the state shall be used by the state board in the administration and promotion of social welfare in the state of Kansas: Provided, Such property may be given, loaned, or placed at the disposal of any county, city, or state agency engaged in the promotion of social welfare. (m) The state board shall prepare annually, at such time and in such form as the governor may direct, a budget covering the estimated receipts and expenditures of the state board for the ensuing year. (n) The state board shall have authority to make grants of funds, commodities, or other needed property to county boards under such rules as the state board may prescribe for the promotion of social welfare in the respective counties. (o) The state board shall have authority to sell any property in its possession received from any source whatsoever for which there is no need or use in the administration or the promotion of social welfare in the state of Kansas. (p) The state board shall adopt a seal. (q) The state board shall initiate or cooperate with other agencies in developing programs for the prevention of blindness, the restoration of eyesight, and the vocational rehabilitation of blind persons, and may create a department for the blind within the state board, and the state board may initiate or cooperate with other agencies in developing programs for the prevention and rehabilitation of other handicapped persons. (r) The state board shall develop a child welfare service program and shall administer or supervise child welfare activities including the care and protection of department, neglected, defective, illegitimate, and delinquent children and children in danger of becoming delinquent, and shall cooperate with the federal government through its appropriate agency or instrumentality in establishing, extending and strengthening such services and undertaking other services to children authorized by law: Provided, Nothing in this act shall be construed as authorizing any state or county official, agent, or representative, in carrying out any of the provisions of this act, to take charge of any child over the objection of either of the parents of such child or of the person standing in loco parentis to such child except pursuant to a proper court order. (s) The state board shall in coöperation with county officials develop plans financed by county funds for providing medical care for needy persons. (t) The state board shall carry on research and compile statistics relative to the entire social welfare program throughout the state, including all phases of dependency, defectiveness, delinquency, and related problems; develop plans in cooperation with other public and private agencies for the prevention as well as treatment of conditions giving rise to social welfare problems. (u) The state board is hereby authorized to receive grants, gifts, bequests, money, or aid of any character whatsoever, for state welfare work. All moneys coming into the hands of the state board shall be deposited in the state social welfare fund provided for in this act. (v)The state board shall have authority and shall perform such other duties and services as may be necessary to carry out the functions of this act and promote social welfare in the state of Kansas, not inconsistent with state

SEC. 8a. Eligibility requirements of applicants for assistance under the federal social security act. (A) General eligibility requirements. Subject to the additional requirements below, assistance in accordance with plans under which federal funds are expended shall be granted to any needy person who: (1) Has not sufficient income or resources to provide a reasonable subsistence compatible with decency and health. (2) Has resided in the state of Kansas continuously for one year immediately preceding such application except as provided in subsection (D). (3) Is not at the time of receiving assistance an inmate of any public institution. An inmate of an institution may, however, make application for such assistance but the assistance, if granted, shall not begin until after he ceases to be an inmate. (4) Has not made an assignment or transfer of property for the purpose of rendering himself eligible for assistance under this act at any time wtihin two years immediately prior to filing application for assistance. (B) Additional requirements for old-age assistance. Assistance shall be granted to any needy aged person, subject to the general eligibility requirements as set out in subdivision (A) of this section, who has attained the age of sixty-five years. Such assistance shall be known as old-age assistance. (C) Additional requirements for assistance to the needy blind. Assistance shall be granted to any needy blind person, subject to the general eligibility requirements as set out in subdivision (A) of this section, who is sixteen years of age, and who shall not during the period of receiving assistance solicit alms. Such assistance shall be known as aid to the blind. No such assistance shall be furnished any individual for any period with respect to which he is receiving old-age assistance under a state plan approved under title I of the federal social security act. (D) Additional requirements for assistance to dependent children. Assistance shall be granted under this act to any dependent child, subject to the general eligibility requirements as set out in subdivision (A) of this section, who: (1) Has resided in the state of Kansas for one year immediately preceding the application for such assistance; or was born within the state within one year immediately preceding the application, and whose mother has resided in the state one year immediately preceding the birth of the child; (2) is living in a suitable family home meeting the standards

of care and health fixed by the laws of the state and the regulations of the state board. Such assistance shall be known as aid to dependent children.

SEC. 9. State social welfare fund, disbursement and apportionment. There is hereby created in the office of the state treasurer a fund to be known and designated as the social welfare fund. All moneys received by the state board as grants, gifts, bequests, and/or state aid for the purpose of state welfare work, shall be deposited by said board in the social welfare fund. All disbursements made from the social welfare fund shall be made by the filing of vouchers in the office of the auditor of state, signed and approved by the director of the state board, and upon the filing of the same, the auditor of state is hereby authorized and directed to draw his warrants upon the state treasurer for same: Provided, That vouchers for the payment of money to individuals be verified and signed by the persons entitled to such payments. All of such warrants to be delivered by the auditor of state to the director of the state board. The various counties shall be entitled to participate in the state social welfare fund for the purpose of furnishing assistance under this act and the state board shall make disbursements from the state social welfare fund for such participation in the following manner: (a) All sums and grants received from the federal government as provided for under the federal social security act, shall be paid to each county in amounts equal to one half of the total of the sums expended during such month as old-age assistance, and aid to the blind, and one third, or such proportion as may be hereafter provided for by federal act, of sums expended during such month as aid to dependent children, which expenditure shall be approved by the state board, and shall be in compliance with the rules and regulations of the federal government, not counting so much of such expenditures with respect to any individuals for such month as exceeds the maximum amount specified in Public-No. 271-74th congress (H. R. 7260), or as may be hereafter amended: Provided, The amount received from the federal government for administrative expense shall not be included in making this disbursement. (b) All other moneys including money raised or appropriated for state welfare purposes except such amounts as are acquired or appropriated for administrative expenses of the state board shall be paid to each county of the state to the extent of thirty percent of the approved social welfare expenses less cost of county administration of said respective county after deducting from the total expenditures the amount of federal grant or grants to the cases of such county entitled to federal assistance: Provided, That each county shall be paid on the same percentage basis: And provided further, That the state participation in the county welfare expenses shall be governed at all times by funds available for such purposes: And provided further, That in order to make compliance with the provisions of the federal social security act, the state may advance additional moneys to any county, which has insufficient funds to pay its share of old-age assistance, assistance to dependent children and the blind. Such amounts advanced to a county shall be caused to be included in the social welfare budget of such county for the ensuing year and shall be repaid to the state social welfare fund when collected by said county: Provided further, That disbursements to the welfare funds of the various counties may be payable in advance, said advance payment to be determined by the state board upon estimates submitted by each respective county board upon forms furnished by the state board, said estimates showing the amount the respective county or counties will pay in assistance under this act during the ensuing month together with adjustments of any cases where insufficient payments or overpayments were made upon estimates submitted by said county for the prior month or months.

SEC. 10. The county board. The county social welfare board shall be the board of county commissioners of each county and it shall be their duty to discharge all duties designated herein to be discharged by the county board, and they shall provide aid, assistance and service on the basis of need in the county in accordance with state laws and the rules and regulations of the state board. The boards of county commissioners shall establish their welfare organization within thirty days after the state board is organized.

SEC. 11. The county director. The county board shall appoint by resolution a county director who shall be properly qualified in the field of social welfare work and whose qualifications have met the standard established by the state board. The compensation of the county director shall be fixed from time to time by the county board. He shall give such bond as may be required by said county board, the premiums thereof to be paid by the county board. The county director, subject to the approval of the county board may appoint one of his assistants as a deputy county director, to whom he may assign the duties and powers of his office during his absence or incapacity. The county director and the deputy county director shall hold office at the pleasure of the county board, or until the approval of either is withdrawn by the state board. The county director shall be the executive and administrative officer of the county organization, and shall perform all such other duties as required by the county board.

SEC. 12. Powers and duties of the county board. (a) The county board shall provide for such employees as in their judgment may be needed from time to time to carry out the provisions of this act, and prescribe the duties and compensation thereof. The county board shall determine the general policy and make all social welfare rules and regulations regarding aid, assistance, or service to persons in need within the county, not inconsistent with state laws and rules and regulations of the state board. (b) It shall be the duty of the county board to prepare and keep up to date a good and sufficient record evidencing the need of each case receiving public assistance in the form of cash, commodities, rent, hospital, medical and surgical care, or other assistance. (c) The county board shall make the reports prescribed by the state board on forms and records provided by the state board. (d) The county board and the private agencies shall maintain two files of the cases; one shall be the public file, which shall contain the approval and financial data needed; and the other shall be the case record file containing the case history and confidential personal or family data which is obtained in the course of assisting the client. The confidential case record files shall be kept by the county boards and the private agencies, and they may be available only to the officers and employees of the county boards, private agencies, and the state board. When any private agency shall cease to function it shall file its records with the state board and its confidential records shall be kept confidential by the state board. The county shall maintain a perpetual index on a form prescribed by the state board of all the applications for assistance through the county board and private agencies. (e) The county board may, under the direction and subject to the approval of the

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state board, find suitable homes for dependent or deliquent children referred to it by the probate court or other court. and place and supervise the children in such homes: Provided, This shall not prevent the use of licensed private child-placing agencies by the county board or probate court or other court when desired. (f) The county board is authorized to receive, have custody of, and protect, the same as other county money, any grant, loan, or advance of funds from the state board for social welfare purposes and to disburse and account for the same in the manner provided in this act. The county board is authorized to receive gifts and grants of funds, commodities, or property of any kind usable and useful in carrying on the work of the county organization, subject to the approval and rules of the state board, and to receive grants of funds, goods, commodities, or other property from the state board, subject to the conditions thereof for carrying on the county relief work. Any property belonging to the state board in the possession of the county board which is not useful and usable in the conduct of the work of the county may be transferred to the state board or sold in accordance with rules and regulations prescribed by the state board. Any articles produced on any work project sponsored by the county which are not needed by the county may be transferred to the state board. (g) The county board shall prepare and submit to the state board on or before June 1st of each year its county welfare budget in such detail as the state board may prescribe. The state board shall examine said proposed budget and approve the same or make such recommendations and requirements as it shall deem advisable and return the same to the county board on or before June twenty-fifth of each year. The county board shall correct said budget in accordance with the directions of the state board and shall submit the same as corrected to the board of county commissioners. It shall be the duty of the board of county commissioners to make such levies upon the taxable property of the county as is necessary to raise the funds required by the county welfare budget: Provided, The levy shall not be in excess of that authorized by law. In the preparation of said budget and in its examination by the state board there shall be taken into consideration the estimated amount of grants the county will be entitled to receive from the state welfare funds including the federal aid contribution thereto. (h) The county board shall maintain at least one intake office and as many additional intake offices as it deems necessary. A person desiring public assistance. or if such person is incapacitated, his relative or friend, shall make application at the intake office. When it is necessary county workers may take applicants elsewhere at any time. Such application shall be under oath and contain a statement of the amount of property, both personal and real, in which the applicant has an interest and of all income which he may have at the time of the filing of the application and such other information as may be required by the state board. All applications for old-age assistance shall be signed by the applicant and spouse, if any. The form of application and the procedure for the determination of need, the amount and kind of assistance shall not be inconsistent with the state law and the rules and regulations of the state board. (i) The county board, on the death of a recipient of old-age assistance, may pay reasonable funeral expenses, not exceeding one hundred dollars, if the estate of the deceased is insufficient to pay the same.

SEC. 12a. County home. The poor farm or infirmary

of any county shall be referred to as "the county home." The county board shall supervise the county home. Persons shall be admitted to the county home by the county board when it appears that the person will benefit more by living in the county home than at some other place and in some other manner; but nothing herein shall be construed as requiring the county or the county board to admit or keep any person needing public assistance in the county home. Persons cared for at the county home shall be provided with proper clothing, sufficient food, clean quarters, and means of recreation. Persons admitted to the county home may be assigned tasks in accordance with their ability, age, and physical health. A strict account shall be kept of the cost of operating the county home and the income produced by the activities of the home, including all farming, dairying, poultry, and other operations. The county board shall appoint a properly qualified person for the management of the county home and such other employees as they deem necessary. Nothing herein shall be considered as affecting any existing contract between a county and the superintendent of the county poor farm. The superintendent shall be under the supervision of the county director as regards the assistance of the persons admitted to the county home and the kind and amount of work, if any, which they may be required to do. It shall be lawful for the board of county commissioners, whenever they deem it advisable, to purchase a tract of land in the name of the county, and thereupon to build, erect, establish, organize, and maintain a home for persons eligible to public assistance; and when two or more counties shall have jointly purchased any tract of land and erected an asylum for the poor, they shall have power to continue such joint ownership during their pleasure as a county home; and it shall be lawful for the county commissioners of two or more counties jointly to purchase lands, erect buildings, and make improvements, and do other things proper and necessary for the maintenance of a county home and to make such orders regarding joint supervision as may be agreed upon. To raise the sum necessary for the purchase of land and the erection of buildings and the furnishing of the same, and the making of improvements, the board of county commissioners shall have power to levy a tax in any one year for the ensuing year of not exceeding one tenth mill as mentioned in section 79-1947 of the General Statutes of 1935, under the levy authorized for "county asylum, farm or home": Provided, Nothing herein shall prevent the county from issuing poor funds as provided by law.

SEC. 13. County welfare fund. (1) There is hereby created in the office of each county treasurer in this state a fund that shall be known and designated as the county welfare fund, and in which shall be deposited all receipts from taxes, funds derived from warrants and bond issues, sales, private gifts, grants, loans, and other revenues which the county board is authorized to receive. The fund so created shall be in such sum as shall guarantee that said county will be able to meet fully all obligations for assistance to the aged, the blind and the dependent children who are entitled to such assistance and are certified therefor: Provided, That the county may create special social welfare funds as authorized by the state board. All disbursements shall be made from such county welfare fund upon vouchers signed by the county director and approved by the county board: Provided, That vouchers for the payment of salaries and expenses of the county welfare organization shall be verified and signed by the persons entitled to such payment. The vouchers authorized by

this section shall be approved by the county attorney and filed with the county clerk who shall draw warrants upon the county treasurer for each such voucher. Such warrants shall be countersigned and registered by the county clerk and the county treasurer as are other county warrants and after delivery to the claimants shall be redeemable upon proper presentation to the county treasurer.

SEC. 14. Settlement. The state board shall have power to and shall: Establish the requirements for obtaining settlement in order to oblige a county to assist any inhabitant or other person as a permanent settler until loss of settlement or as a transient person; establish the requirements for losing settlement and may change and amend and add to such requirements, and make rules and regulations regarding the same; make rules and regulations relating to the removal of persons to place of settlement. The state board shall have power to render decision; on settlement controversies between persons and counties, between counties, and for a county upon a controversy with another state or settlement unit of another state, and unless an action in court is brought within thirty days after the receiving of the decision, the decision of the state board shall become final as to such controversy but shall not be considered as a binding precedent; and nothing herein shall prohibit any person or county from bringing an action in court to establish the fact of settlement under such requirements within the thirty days. The state board shall have power to enter into agreements with other states, or the welfare departments of other states, in regard to the manner of determining the state of settlement in disputed cases, the manner of returning persons to the place of settlement, and the bearing or sharing of the costs.

SEC. 15. Illegal disposition of assistance; execution, etc. Assistance of a tangible kind granted under the provisions of this act shall not be sold or otherwise disposed of to others by the client or by anyone else except under rules and regulations of the state board, and any client or other person convicted of violating this provision shall be imprisoned in the county jail for not to exceed ninety days. None of the money paid, payable, or to be paid, or any tangible assistance received under this act shall be subject to execution, levy, attachment, garnishment, or other legal process, or to the operation of any bankruptcy or insolvency law.

SEC. 16. Private agencies, license; penalty. The state board shall have power to license, revoke licenses, and supervise private agencies under the rules and regulations prescribed by it. All private agencies shall be licensed within nine months after this act shall take effect: Provided, That all private agencies are required to have temporary or permanent licenses on or after sixty days after this act takes effect: Provided further, That the state board may extend the period of such temporary license for a period not to exceed one year from the date this act shall take effect. It shall be unlawful for any person, persons, corporation, or organization not licensed as a private agency to operate as a private agency, and any person, persons, corporation or organization convicted of violating this section shall be deemed guilty of a misdemeanor and punished by a fine of not to exceed five hundred dollars.

SEC. 17. Recovery from a recipient; lien for assistance granted. The state of Kansas shall have a lien upon any real property which the recipient of any old-age assistance under this act may be the owner of or come in possession of after the granting of any assistance, which lien shall

be senior and superior to any lien placed on any such real property after the time such recipient shall first become a client as defined in this act. This lien shall be perfected by filing a notice in the office of the register of deeds of the county in which the recipient resides, or in any other county, which notice shall state in substance that assistance is granted to the recipient by the state of Kansas under the provisions of this act, and that same constitutes a lien upon any real estate in the county in which suit is filed, then owned or thereafter acquired by the recipient until said lien is discharged by the recipient. The filing of such statement shall constitute public notice of the lien and shall remain in full force until discharged as herein provided without any further additional steps being taken. The recipient of any assistance can discharge such lien by repaying to the state of Kansas at any time all sums received from the state as assistance under this act, whereupon it becomes the duty of the director to file in the office of the register of deeds a notice setting forth in substance the fact that all payments made under this act have been repaid and that the lien existing against the property is, therefore, discharged. The board may authorize the release of the lien so created upon payment to the board of the value of the property subject to such lien. No fee shall be charged for the filing or the release of any lien statement. On the death of any recipient the total amount of assistance paid under this act shall be allowed as a claim against the estate of such person after funeral expenses not to exceed one hundred dollars have been paid, and after the expenses of administering the estate have been paid. If there is not sufficient personal property in the estate to pay such claim the same shall be collected from any real estate owned by the deceased under the lien created by this section. The lien created against the real estate of the recipient shall not be enforced against the same during his lifetime or while any real estate is being occupied as a home by the surviving spouse. The federal government shall be entitled to a share of any amount collected from the recipient or from his estate equal to not more than one half of the amount collected if required as a condition to federal financial participation, and the county shall be entitled to its share of said amount collected up to the amount so expended by it, subject to the prior claim of the federal government. The amount due the United States shall be promptly paid or credited upon collection to the United States government.

SEC. 18. Penalty relating to fraudulent acts. Any person who obtains or attempts to obtain, or aids or abets any other person to obtain, by means of a willfully false statement or representation, or by impersonation, collusion, or other fraudulent device, assistance to which the applicant or client is not entitled is guilty of a misdemeanor, and upon the conviction thereof shall be fined not more than five hundred dollars or be imprisoned for not more than six months or by both such fine and imprisonment; and he shall be required to remit to the county board or private agency the amount of any assistance given him under such fraudulent act. In assessing the penalty, the court shall take into consideration the amount of money or value of property fraudulently received.

SEC. 19. Separability clause. If any section or part of a section of this act shall be held unconstitutional by any court, it shall be conclusively presumed that the legislature would have passed this act without such invalid section or part of a section and the remaining provisions shall be given full force and effect, as if the part held

unconstitutional had not been included herein.

SEC. 20. Effective date. This act shall take effect and be in force from and after its publication in the official state paper.

ACUTE ABDOMINAL DISEASE

(Continued from Page 257)

ACUTE PANCREATITIS

most immediately and the opaque material will pass rapidly into the duodenum. This observation constitutes a distinct advance in the management and understanding of cholecystic disease. Amyl nitrite and glyceryl trinitrate also may be efficacious in the management of those patients who have symptoms following cholecystectomy and which are similar to those experienced before the surgical interference. The etiologic process may be a definite cholangeitis which will eventually require prolonged external drainage by means of a T-tube.

About seventy per cent of patients who have acute pancreatitis give a past history of disease of the gallbladder. Until recently, the consensus of opinion seemed to be that operation was the procedure of choice in the management of acute processes in the pancreas; the operation included drainage of the gallbladder and lesser peritoneal cavity. The mortality of such a procedure is extremely high because the patient is usually in rather marked shock, as a result of the disease, before the operation is begun.

I know of no study that has thrown more light on the cause and treatment of acute pancreatitis than has that of Dragstedt. By experimenting on rabbits and dogs, he showed that pancreatic juice which was allowed to flow into the peritoneal cavity caused no symptoms if it previously had been passed through a Berkefeld filter. In one hundred per cent of the pancreatic juice were allowed to enter the peritoneal cavity without having passed through a Berkefeld filter. In one hundred per cent of the rabbits in Dragstedt's experiments a positive culture was obtained from the pancreatic tissue and the predominating organism proved to be Clostridium welchii. 'The same findings were present in thirteen of seventeen dogs. It was reasoned that necrosis which occurs during acute pancreatitis is caused by bile salts and that the hemorrhage which so frequently accompanies this condition is most likely a protective phenomena against toxicity of the bile salts.

If these experiments have clinical application, and I have discovered that they have, acute pan-

creatitis is an infectious condition, and surgical interference is positively contraindicated. My results have improved strikingly since I have discontinued operating for this condition. The infection which is localized in the lesser peritoneal cavity becomes rapidly generalized after surgical interference and death of the patient ensues in a high percentage of such cases. So far as I know, the best type of management is absolute quiet, transfusion of blood, and the administration of physiologic saline solution intravenously. The majority of patients will recover if treated in this manner, and at a later date attention can be given to the disease of the gallbladder, which so frequently coexists.

NEWS NOTES

SPECIAL BULLETIN

Kansas was honored at the Atlantic City session of the American Medical Association through the election, by the House of Delegates, of Dr. J. F. Hassig, Kansas City, to a three-year term on the newly created Council of Awards for distinguished service in the science of medicine.

The Council will serve in a capacity of recommending members and fellows who should be recognized by the Association for distinguished service to the profession.

COMMITTEE APPOINTMENTS

Dr. J. F. Gsell, President, recently announced the following committee appointments to serve from May 1937 to May 1938:

AUXILIARY

MONIBIARY	3375.1.5
E. J. Nodurfth, M.D., Chairman	
Cyril V. Black, M.D.	
L. B. Gloyne, M.DK	ansas City
N. C. Morrow, M.D	Parsons
C. Omer West, M.DK	ansas City
CONSERVATION OF EYESIGHT	
Lyle S. Powell, M.D., Chairman	Lawrence
Wilbur G. Gillett, M.D.,	
George Gsell, M.D.	
H. L. Kirkpatrick, M.D	Topeka
William M. Scales, M.D.	lutchinson
CONTROL OF CANCER	
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CONTROL OF CANCER Te C. C. Nesselrode, M.D., Chairman, Kansas Cit	erm expires y1940
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ENDOWMENT	
H. L. Chambers, M.D., Chairman	Lawrence
F. C. Boggs, M.D.	Topeka
J. L. Grove, M.D.	
P. A. Pettit, M.D.	Paola
R. A. West, M.D	Wichita
HOSPITAL SURVEY	
A. R. Hatcher, M.D., Chairman	
V. E. Chesky, M.D	
F. L. Dennis, M.D.	
L. C. Joslin, M.D.	Harper
C. E. Joss, M.D.	
M. F. Russell, M.D	Great Bend
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Dr. Gsell plans to hold a meeting of committee chairmen during July for discussion of programs each committee will accomplish during the year.

J. V. Van Cleve, M.D.....Wichita

It will be noted that a new committee on conservation of eyesight has been appointed. This group it is believed will be able to engage in an extensive program under the Social Security Act.

OSTEOPATHIC PERMITS

The Commissioners of Internal Revenue, Washington, D. C., ruled on April 9, 1937, that osteopaths will no longer be entitled to receive narcotic permits.

As a result of this, no new permits have been issued after that date and those already issued will lapse without renewal on June 30, 1937.

SOCIAL SECURITY

Governor Walter Huxman recently announced the following appointments to the Kansas Social Welfare Board which will administer Social Security Act functions in this state:

Mr. Ben S. Paulen, Independence.

Mr. Al G. Wright, Kansas City.

Mr. Jesse Turner, Parsons.

Mr. Douglas A. Graham, Topeka.

Mr. C. F. Scott, Iola.

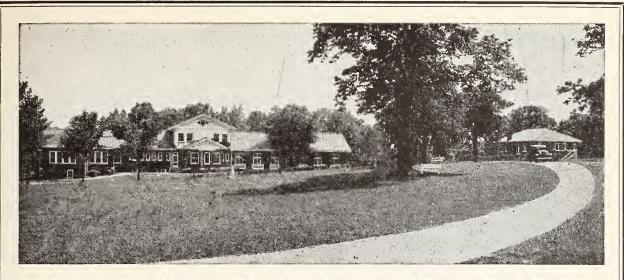
Mr. R. B. Church, Wichita, state director.

Mr. Church assumed office on May 10 and the Board is now holding frequent meetings with him in the interest of completing arrangements for state and local organization. It is probable that the Kansas program will be fully in effect by the latter part of August.

Representatives of the Society are conferring with the director in the interest of offering assistance in the handling of the blind, indigent, and other medical problems

involved in the act.

JUNE, 1937



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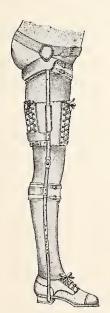
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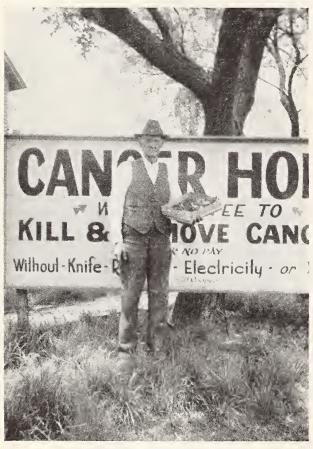
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INJUNCTION LAW

The 1937 session of the legislature enacted a bill which permits the state to use injunction and quo warranto to enjoin and oust individuals from practicing medicine and surgery, as defined by the law of the state of Kansas, where such practice is unauthorized. Pursuant to that law, the state has filed four actions. One of these is against W. W. Cooper of Altoona, a purported cancer specialist who is not licensed to practice any type of the healing art. A hearing is anticipated early in June on this case.



W. W. COOPER, Altoona, Kansas

Another action has been filed against W. H. Wray, Salina, Kansas, also an unlicensed practitioner who purports to be a specialist on tuberculosis.

A further action is pending in the District Court of Manhattan against Gus A. Salley, a licensed osteopath. This action is for the purpose of testing out the right and privilege of an osteopath to practice medicine and surgery.

A similar action against B. L. Gleason was filed direct in the Supreme Court on June 2.

It is hoped that the decisions in these cases will settle many problems of law that have not yet been determined by the courts.

SALES TAX

A descriptive bulletin outlining the obligation of physicians under the new Kansas sales tax was forwarded to all members on May 27.

In accordance with rules and regulations adopted by the Kansas Tax Commission physicians will usually be considered to be consumers of the tangible personal property they utilize in conjunction with professional service. They will, therefore, pay the sales tax to their suppliers at the time of purchase of materials, and will not be required to secure registration certificates, keep tax records, collect tokens or remit to the Commission.

The central office will be glad to assist members in all ways possible in securing information or guidance on sales tax problems.

MEMBERSHIP

Present membership in the Society stands at 1418. It is the hope of the central office of the Society that a new record of more than 1500 may be established this year and thus any assistance the county medical societies or members can give in this direction, will be greatly appreciated.

DEFENSE

Information was received that the American Bar Association has ruled the defense plan of the Ohio State Medical Association an unlawful practice of law. Ohio has, therefore, discontinued its provision of defense assistance.

Study is being given at the present time as to whether this ruling will affect the Kansas plan.

COUNTY SOCIETIES

The regular meeting of the Clay County Medical Society was held in Clay Center on May 19. An illustrated lecture on "Pathological Chest Conditions" was given by Dr. L. E. Peckenschneider of Halstead.

Dr. F. H. Buckmaster, Dodge City, was elected as secretary of the Ford County Medical Society to fill the vacancy left by Dr. C. L. Hooper, at a meeting of that society on May 14. Dr. C. A. Hellwig and Dr. V. L. Pauley, of Wichita, spoke, respectively, on "Colloid of Toxic Goiter", and "Classification of Goiter".

The Meade-Seward County Medical Society met in Liberal on May 7. Guest speakers on the program were Dr. J. R. Lemmon and Dr. J. W. Hendrick, both of Amarillo, Texas. Dr. Lemmon spoke on "Pylorospasm" and Dr. Hendrick spoke on "Pelvic Pains".

Approximately thirty members and guests attended a dinner-meeting of the Pratt County Medical Society held in Pratt on May 28, at the Roberts Hotel. Dr. Norman Reider, Topeka, and Dr. W. F. Bernstorf, Winfield, were the principal speakers on the program. Their topics were respectively, "Brain Tumor" and "Value and Indications for Sedimentation Test".

Election of officers was the main order of business at a meeting of the Sedgwick County Medical Society in Wichita on May 18. The following physicians were elected to serve for the coming year: Dr. G. B. Morrison, President; Dr. F. J. McEwen, vice-president; Dr. Earl L. Mills, secretary; Dr. H. R. Hodson, treasurer; and Dr. J. W. Cheney, censor.

A meeting of the Washington County Medical Society was held in Washington on May 11. Dr. F. R. Croson, Clay Center, Dr. J. L. Lattimore, Topeka, and Clarence Munns were the guest speakers.

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The Wilson County Medical Society held a dinnermeeting in Altoona on May 10.

The regular monthly meeting of the Wyandotte County Medical Society was held in Kansas City on May 18. The program was as follows: Dr. H. R. Wahl, Pathological Conference; "Bronchogenic Carcinoma", Dr. W. W. Summerville; "Radiology of Bronchogenic Carcinoma", Dr. G. M. Tice.

MEMBERS

Dr. Fred E. Angle, Kansas City, Kansas, left in May for a three-month's trip to Europe. Dr. Angle's itinerary through the principal cities and capitals of fourteen European countries is designed in accordance with a definite purpose to visit medical clinics, which will fit in with his special research hobby, the study of undulant fever. He has arranged his trip through International Clinics, an organized annual travel tour for physicians. About fifty doctors will be in the party. They will have special meetings on board ship and after landing abroad will follow an intensive tour for a month that will take them to clinics in twelve important cities.

Dr. J. C. Cole, formerly of St. Marys, has established a full-time office in Emmett.

Dr. E. Ř. Core, Bird City, has left for Mount Upton, New York, where he will remain for about six months. Dr. Otis True, Hays, is taking over Dr. Core's practice in Bird City.

Dr. Raymond Gelvin, Concordia, was elected president of the St. Joseph Hospital staff at the annual meeting April 29. Dr. G. E. Martin was elected vice-president, and Dr. Richard Kiene, secretary-treasurer.

Dr. R. H. Moser, Westmoreland, has recently moved to Holton, where he has gone into partnership with his brother, Dr. E. C. Moser. Dr. Thomas Dechairo, University of Kansas School of Medicine, will arrive in Westmoreland in June to take over Dr. Moser's practice. Dr. W. T. Creviston, Olsburg, has been appointed county health officer in place of Dr. Moser.

New staff officers of St. John's hospital, Salina, elected April 25 are Dr. H. E. Neptune, president; Dr. Charles M. Jenney, first vice-president; Dr. W. R. Dillingham, second vice-president; Dr. C. W. Armstrong, secretary and Dr. J. K. Harvey, treasurer, all of Salina.

Dr. Thomas G. Orr, University of Kansas School of Medicine, has been elected to membership in the International Society of Surgery.

Dr. H. H. Olson, Wichita, was one of 119 physicians of the United States and Canada elected to associate membership of the American College of Physicians, in the conference at St. Louis. Two other Kansans, Dr. Philip W. Morgan, Emporia, and Dr. Frank A. Trump, Ottawa, were elevated to fellowships.

Dr. Leo V. Turgeon. Wilson, has been appointed to the State Board of Administration by Governor Walter A. Huxman.

New members of the Menninger Clinic Staff, Topeka, Kansas, include Dr. Joseph Pessin from the Los Angeles County General Hospital, who received his Ph.D. degree from the University of Wisconsin and his medical degree from the University of Chicago Medical School; Dr. Robert T. Morse, who was resident physician in the Palmer House, Chicago, and who received his medical

degree from Northwestern University Medical School; and Dr. Eugene Eisner from the Milwaukee Children's Hospital, who received his medical degree from Bellevue Medical College, New York City.

UNEMPLOYMENT COMPENSATION

The Unemployment Compensation Division of the Kansas Commission of Labor and Industry has recently forwarded questionnaires and descriptive data concerning unemployment compensation under the Social Security Act to all employers in the state.

The Kansas Unemployment Compensation Act provides that all employers of eight or more persons must make contributions to the state compensation fund. Employers of less than eight persons are privileged to make voluntary contributions if they desire, but are not compelled to do so.

Physicians as a whole will not be affected by the compulsory provisions of the Act inasmuch as they usually do not employ eight or more persons. However, each physician receiving a questionnaire from the Unemployment Compensation Division must complete and return the form inasmuch as the Division is legally entitled to request information of this kind.

DEATH NOTICES

Dr. Frank W. Emery, retired Wichita and Winfield physician, died at his home in Wichita on April 9. Born in Lawrence, Kansas, Dr. Emery was a graduate of the University Medical College at Kansas City. He rose to prominence at Winfield during the World War as a member of the Medical Board of Examiners for recruits. He practiced medicine at Winfield twenty years prior to going to Wichita in 1920. He had also practiced in Kansas City, Missouri, several years. Dr. Emery was a member of the Sedgwick County Medical Society.

Dr. Henry Benton Johnson, 66 years of age, died May 7 from a heart attack, at his home in Pomona. He was born on a farm near Jacksonville, Illinois, on February 27, 1871, attended Baker University at Baldwin for three years, and in 1898 went to Chicago to enter Rush Medical College. In 1902, Dr. Johnson returned to Pomona where he practiced for thirty-five years. He was a member of the Franklin County Medical Society.

Dr. James M. Scott, 44 years of age, died at his home in Topeka on May 13. Born in 1893, he was a native of Smith County and lived for several years in Lebanon. During the last several years, however, he had made his home in Mankato. Early in his first term Ex-Governor Alf. M. Landon appointed Dr. Scott as chairman of the State Board of Administration and he was continued in service after Governor Walter Huxman was inaugurated. He was a member of the Smith County Medical Society.

Dr. Clive Sidney McGinnis. 69 years of age, died at his home in Parsons on May 14. He was born in 1877, at St. Louis, Missouri. Before going to Parsons in 1920 Dr. McGinnis served in the Katy railroad hospital service, first at Sedalia, Missouri, and then in Parsons. In 1923 he was appointed superintendent of the State Hospital for Epileptics at Parsons. He was a graduate of Washington University Medical School, St. Louis, and was an interne at St. Mary's infirmary two years before going into private practice at Houston, Texas. After two years of practice he entered the Katy hospital service. He was a member of the Labette County Medical Society.

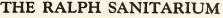
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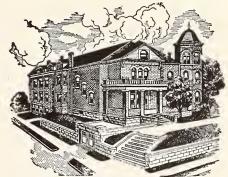
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AUXILIARY

Edited by Mrs. W. G. Emery, Press Publicity Chairman

At the state convention held in Topeka May 4 to 6 in-clusive we had a good attendance. Mrs. J. Theron Hunter, General Chairman, and her helpers deserve a vote of thanks for making our stay so pleasant. It was a privilege and an honor to have as guest speaker, our national Vice-President, Mrs. David S. Long. Her inspiring message left us with a challenge to push on to still greater heights the next twelve months. We will always cherish the memory of the joyous day she spent with us, sharing in the promotion of a great cause.

It is very encouraging to know that in this great work we have the whole hearted interest and active cooperation of such a large number of women who are willing to give their time and energy unselfishly, working for the ideals for which this organization stands.

There is always a pleasure in accomplishment and gratification in the thought that we have, by conscientious effort, reached the completion of our year's work.

The main objectives that have been emphasized this year have been the importance of the auxiliary members educating themselves along health matters in order to extend authentic information on health.

Saline and Cloud counties were organized in March. The climax of my administration came with the organization of the Women's Auxiliary to the Shawnee County Medical Society in Topeka on April 26. We are indeed very happy to have these splendid groups added to the state.

The success attained is sufficient evidence of the splendid cooperation the state organization received from the counties.

To the best of my knowledge I have answered every letter that has come to me. I have sent out all routine correspondence such as letters to my official family and calls for meetings. I have attempted to answer in some manner all questions within my authority. I have written a President's message, with the exception of one, every month for the State Medical Journal.

No action of major importance has been taken without consulting the advisory chairman, Dr. E. J. Nodurfth.

To Dr. Snyder, President of the Kansas Medical Society, Dr. Nodurfth and Mr. Munns, I extend my warmest gratitude and appreciation for their support.

A year ago as I stond at the threshold of a new experience, I promised to fulfill the duties as your leader to the best of my ability. In a logical and constructive manner I have endeavored to be sincere and understanding in my contacts with our members and administer faithfully the work of the auxiliary.

I know the support that has been accorded me the past year will be extended to Mrs. Urie next year. Her knowledge and understanding of auxiliary work will add much to the vision and progress of achievements in the auxiliary field.

Mrs. L. B. Gloyne, Retiring President.

PRESIDENT'S MESSAGE

Another page in the history of the Women's Auxiliary to the American Medical Association has been turned.

Another year of successful achievement has come to a close. Another milestone in the march of progress made by the organized woman power of the American Medical Association has been passed, and another foundation stone has been firmly placed on which to build an organization as far reaching in its scope as its needs may ever become.

How strong our first leaders were is evidenced by the steady and strong growth of our organization in the short time that has elapsed since its inception. We are fortunate in having so many of them with us today to inspire us and to lend their keen judgment and calm counsel when problems arise.

In assuming the duties and responsibilities of president of the Women's Auxiliary, I am deeply conscious of the fact that to follow one who has so thoroughly proved her worth may be a very grave disadvantage in that to live up to the high standards set by her efficiency may be a big task. Another view might be that she, together with other capable presidents who have preceded her, have set the stage for carrying out the program of the year is all that is necessary. Neither view is exactly true.

The beginning of each Auxiliary year is as a new day, bringing its own problems and possibilities, its new obstacles to be overcome and new victories to be won.

Should you be asked what is the major objective of the Women's Auxiliary, unhesitatingly you would answer, "To interpret intelligently to the laity the underlying purpose of the American Medical Association." If asked how, you could not so readily answer. For thereby hangs the story and therein lies the problem to be solved by the Auxiliary, as guided by the advisory council.

We are told that "after man came woman," and history has proven she has been "after him" ever since. However, today, in the onward and upward movement of womankind, we as doctors' wives pride ourselves not in following after but in keeping abreast or in step with our husbands in their effort to advance health and health education.

The study of health is the most vital subject of the entire Auxiliary program, since it relates and integrates every phase of life—living. We use the term living, because it is continually moving, changing, acting and reacting.

Through the daily press, numerous periodicals and radio, volumes of information concerning medical science are regularly brought to the mind of the public, even the remote sections of the country. It should be the purpose of the Auxiliary members, individually, to keep so informed regarding the art and practice of her husband's profession that she will readily recognize whether the lay mind is being informed or misinformed. We need a correct answer every day, to keep some lay person or group on the right track in regard to the medical profession.

Each member should be helping herself to the material on her husband's desk. It costs you nothing, and is there for the asking. Almost every state journal is full of the latest information that you and I should be reenforcing our minds with. It has been said again and again we cannot teach others when we ourselves lack knowledge. Repetition does not lessen the truth of this statement.

Everybody should make Hygeia a regular monthly diet. You just cannot exist in an Auxiliary way without it. Your influence in urging its use in any and every conceivable way by the lay public will repay you and yours a hundred ways. I plan to make no radical changes in any department of our work.

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keynote. For the mutual benefit of every one on our membership list, let the press and publicity department have your choice bits of work, your plans and your accomplishments.

It seems rather unnecessary to remark that the organization work must be continued.

Build up a listening audience for the A. M. A. broadcast. In the matter of legislation touching the medical profession not only physicians' wives but every woman should be informed. One more point to stress-before undertaking to solve any problems always consult your advisory council, both state and county.

I earnestly bespeak your cooperation for this coming year, for without your aid I can expect only failure.

We believe that the spirit of the Auxiliary service lies in the ability to be human in all things, to know what to do and do it cheerfully, and to keep everlastingly at it until the job is finished. Then in analyzing the question of how much have I helped, we become aware of how much we have been helped. In this connection there comes to mind the old Hindu proverb, "Help thou thy brother's boat across, and lo, thine own hath reached the shore.'

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April 27 the Labette County Auxiliary entertained Mrs. L. B. Gloyne, State President, at the home of Mrs. T. D. Blasdel. Mrs. G. W. Hay presented a paper, "The Germ We Live With." At the close of the meeting Dr. and Mrs. Blasdel entertained with a buffet supper for members of the Labette County Medical Society and several out-of-town guests. Mrs. Mirl Ruble and Mrs. N. C. Morrow presided at the beautifully appointed table.

Since the months of June, July and August are vacation months and during this time there is more planning than activity in Auxiliary circles the Press-Publicity chairman will not have a great deal of news to present, although some of the auxiliaries meet every month. She plans, however, to keep up the Auxiliary page with matter which she hopes may be suggestive and helpful.

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THE RELATION OF LIFE INSURANCE TO MEDICAL PRACTICE*

W. E. THORNTON, M.D., †

Fort Wayne, Indiana.

The medical profession has been associated with life insurance ever since man first devised this method of protecting his obligations against the Great Vicissitude. At first the doctor was merely an advisor, but for nearly a century he has been an integral part of the vast mechanism that insurance has become and he has shared in its tremendous growth and development until now the activity which I represent enriches the medical profession of the United States and Canada by a sum not less than fifteen millions of dollars annually. It contributes more than sixty per cent of all estates that pass at death and a substantially higher proportion in the classes of people among whom most of you practice. This is bill paying money and the bills paid include many fees for medical services rendered.

However commanding of your attention are the economic aspects of insurance medicine, the scientific and practical phases are more suitable to this occasion and it is of these that I propose to speak.

The duties of a medical director bring him into contact with many doctors in all parts of the country and he is struck by the fact that the methods, the data, the resources and indeed the very nature of insurance medicine is all but unknown. Why this should be is a little obscure, for, on the one hand there are no secrets about it and on the other practically every doctor has had contacts with it either as an examiner or as an applicant for insurance. It may be that we of insurance have been a little backward in telling of our work; it may be that the material upon which we base our actions is somewhat inaccessible and is in a form which

*Presented before the 78th Annual Session of The Kansas Medical Society, Topeka, May 6, 1937.

†Second Vice-president and Medical Director, Lincoln National Life Insurance Company.

needs some special training to interpret properly, but possibly the chief reason is that the profession at large has simply assumed that there is no great difference between insurance medicine and clinical medicine. There are significant differences, not of fact but of scope, of emphasis, of method and of viewpoint.

Insurance medicine has already made substantial contributions to general medicine. It is insurance that has maintained study of mortality rates, not so much of the crude rates among the population at large, for that is a function of government, but rather of the adjusted rates for various ages and classes. It is insurance that has established the tables of optimum build and that insisted upon the mortality significances of variations from that optimum. It was insurance that early recognized the importance of elevated blood pressure, that cooperated in designing the first practical sphygmomanometer for general use and in popularizing it and that established the scale of "normal" blood pressures, a scale which, until recently, general clinical opinion thought too conservative. Insurance medicine has played an important role in the evaluation of heart murmurs, of albuminuria, cylindruria and glycosuria, of hernia, more recently of peptic ulcer and of many other physical states. It was under direct insurance auspices that Benedict adapted the picramic acid method to urinalysis for sugar, that Kingsbury revived and perfected the sulphosalicylic acid reagent for albumin, that Clark devised his lamp and Exton his electric scopometer. It was insurance support almost exclusively that made possible Eugene Lyman Fisk's popularization of the routine physical examination. Insurance has lent leadership to the public health movement in the persons of Dr. Louis Dublin, Dr. Frederick Hoffman, Dr. Lotka and many others. It has spent millions in carrying the orthodox story of public health to the people and it was the health conservation division of a life insurance company foundation

that in 1934 conducted soundings of American public opinion preliminary to the current campaign against syphilis and gonorrhea.

It is only natural that some of these accomplishments should come through insurance rather than through clinical channels for we enjoy certain advantages from which the clinician is excluded. On the other hand there are many things which we must leave to the clinician because of disabilities under which we labor.

Prior to 1850 insurance companies were for the most part local institutions. Applicants were not routinely examined as at present. Instead they were paraded before the board of directors like mannequins in a style show. Only those who appeared ill or had had many sicknesses were subject to review by a medical man. However, it became apparent that many who appeared quite in health were really the subjects of impairment. Thus physicians became attached to insurance offices and the position of the insurance examiner came into being.

For the next fifty years until the turn of the century the medical profession served insurance in a purely clinical capacity. There was no insurance medicine as it exists today. Each case was judged upon its individual clinical merits and the best clinican made the best medical director.

But there were factors at work which increasingly revealed defects in the system of risk appraisal by purely clinical judgment. It was found that opinions varied, not only as between companies but also within the same office and even with the same medical director according to the temper of the moment. Many of these decisions obviously must have been inequitable either to applicant or to company and in a business whose aim is mathematical accuracy, this was an intolerable situation.

The solution finally evolved takes advantage of one of the great cosmic truths that is built into the very nature of things. That truth has been defined in many ways, but for our present purpose let me describe it thus—any two groups of individuals behave in precisely the same fashion provided both are infinitely large, strictly homogeneous and exposed to identical environments. If we know how one of such groups has acted, we can predict with complete confidence what will happen in the other. The assembling of suitable groups and the examination of the behavior, specifically of the mortality, of such groups is the particular research field of insurance medicine.

I have mentioned three necessary group

characteristics—size, environment, homogeneity.

Fortunately, the size of our groups is not an outstanding problem so far as the commoner impairments are concerned. Insurance is recognized as a necessity in our modern economic system and something over seventy millions of our population are available for this type of study. The number of individuals upon which our conclusions as to the effect of age on mortality now amounts to many millions indeed. Our pronouncements as to build are the result of the carefully controlled observation of at least four million lives. Our investigations of heart murmurs involve the life history of hundreds of thousands of cases. The albuminuria groups number approximately the same and so on with the other common abnormal conditions.

I have mentioned environment as of importance. By environment I mean any and all of the extraneous influences which affect the whole group simultaneously. Such an influence was the influenza pandemic of twenty years ago. Such also was the great World War and the increasing use of the automobile. Another influence acting in the opposite direction is the cumulative effect throughout the years of public health measures, though it is to be observed that his beneficence falls disproportionately throughout the mass. The younger ages benefit the most, the older ages hardly at all. The mechanisms involved in the effects I have mentioned are comparatively clear but there are other phenomena, the causes for which cannot, at this stage, be more than guessed. To this type belongs the improvement in insurance mortality accompanying the depression. It occurred at all ages and from practically all causes with the important exception of suicide.

The third necessary quality of a group is homogeneity. This is the quality most often lacking in the clinical use of statistical analysis and this lack is a chief reason I think for the skepticism with which statistical conclusions are received by the medical profession. It would add immensely to the value of the literature if clinical reporters would familiarize themselves with the principles of statistical analysis or would collaborate with trained statisticians. They would then recognize and report those factors which influence the results and would include a mathematical estimate of the limits of error. However, the biologists, particularly the morphologists and biometricians use the method extensively and more recently some of the great clinical institutions of the country have added

to their staffs those of suitable bent and training and have acquired the necessary equipment. It is only a matter of time until we can expect a regular flow of pronouncements upon clinical problems which will bear the prestige of the unique accuracy of proper statistical method.

The objective of insurance medicine is exact prognosis, particularly exact ultimate prognosis. Obviously this is impossible so far as individuals are concerned, but it is quite feasible and eminently useful if for our unit of mortality we substitute the group for the individual. It is this substitution of the group for the individual that colors the thought and the actions of modern life insurance medicine and that demarcates it most sharply from the intense individualizing of clinical medicine. The effect of the substitution is that instead of being appraised for insurance as an individual, each applicant is simply classified into various groups characterized by the mortality-affecting factors revealed by investigation of his case. The mortality assigned to each risk is that read from the tag on the groups into which it classifies and the values on the tags have been determined by observation of the mortality behavior of similar groups. If you describe a case to me and ask 'How long will this man live?'' I must reply that I do not know, but I can discuss the mortality behavior of a group of ten thousand cases of which this man is the type.

Let us see some of the implications of the group mode of thought. A stock type of story I am told time and time again, concerns the man who was turned down for heart murmur or albumin or what not, usually just after the Civil War. The story ends with the triumphant statement that the man is still living hale and hearty at the age of ninety-six. The individualist thinks there should be something for insurance to learn from this case.

insurance to learn from this case.

Now let me relate another story, the complement of the first one. A young man purchased a ten thousand dollar policy with the double indemnity benefit. He called at the home office of the company, paid his premium and put the policy in his pocket. Less than a block away he was struck in the head and killed by a stone coping falling from an adjoining building. Within twenty-four hours the claim check for \$20,000 was paid. The individualist will exclaim "What a loss the company took on that deal."

But the group thinker says "Venerable age despite impairment on the one hand and premature and tragic death on the other are both quite usual mortality phenomena within the group. The group neither thanks the one nor rues the other. Both events are normal, expected and provided for."

Suppose that tomorrow you are consulted as to the outlook of a case presenting a history of pleurisy with effusion three years ago. As a clinician, your sequence of thought will be something like this—"Pleurisy with effusion is often based upon a tubercular infection, but I find the lungs normal to both physical and x-ray examination. No tubercle bacilli have been found in the sputum at any time. There have been no cough, no hemoptysis, no loss of weight, no night sweats. I do not think tuberculosis is a factor here and accordingly I shall reassure this patient." If the matter of insurance comes up you will probably inform the company that you have examined this case thoroughly and were unable to find any evidence whatsoever of tuberculosis, that barring accidents this case should live to expectancy and therefore should be accepted upon a standard basis. I receive this type of letter almost every day.

But if you have grasped the technique of thinking in terms of the group, your thought sequence will be different. You will picture 10,000 cases, identical with this one as to age and build and all with histories of pleural effusion three years ago, and you will ask yourself, "Among so many, will there be an excess future incidence of pulmonary tuberculosis as compared to another group identical except for the history of pleurisy?" answer must be "Yes, there will be more tuberculosis in the pleurisy group." In this reply, you are supported by the latest mortality study upon the point. Among 6,104 of the very best cases accepted standard by the companies, the mortality was two hundred and eight per cent of the normal rate. The range of error is nineteen per cent. A second group of 6,079 cases, not quite so choice and therefore accepted by the companies on a substandard basis yielded a mortality of two hundred forty-six per cent with possible error not exceeding twenty-two per cent. The incidence of pulmonary tuberculosis was six times the normal. Incidentally deaths from suicide were three times the normal.

By proper statistical analysis of suitable groups we can affix a mortality tag to any impairment that lends itself to homogeneous grouping, provided we can find enough cases and can observe them for a long enough period

of years. When these conditions are satisfactorily full-filled we can measure degrees of mortality that are clinically very minute indeed. Judged from past experience, clinical medicine does not become convinced of extra mortality until the rate exceeds that of unquestionably healthy lives by about one hundred per cent. This is an excess which if extended to any considerable proportion of a company's business would spell quick ruin. Many companies, including the one with which I am associated, make constant use of six stages of mortality below this level of an extra 100 per cent. Each stage has its extra premium or other device for covering its mortality. Some of these stages are separated by as little as twelve and one-half per cent of mortality and in classifying individual risks into these stages, amounts of as little as five per cent mortality enter into the computation. In a group of healthy adults, each of age forty-one, the table upon which most American insurance is based indicates a mortality very slightly over ten per 1,000 per year. This is the 100 per cent mortality for age forty-one. Thus the five per cent mortality of which I spoke as our smallest mortality unit represents only the difference made by a single death per year among each 2,000 people, age forty-one. The actuaries would be shocked at my example. They will not question its accuracy but may claim that I have left so much unsaid that my bare statement may be misleading. However, at this moment, I am not concerned with statistical concepts; I am merely citing a comparison to give an idea of the relative degrees of mortality with which modern life insurance medicine deals habitually.

It is not surprising that in measuring mortalities that are below the clinical horizon, we use group criteria that seem to the clinician unnecessarily refined. For example we determine albuminuria and glycosuria by quantative methods. The terms "trace," amount" and "large amount" are not sufficient. We make cell counts per unit of volume in pyuria and hematuria and cast counts in cylindruria. Similarly when necessary we obtain the actual heart measurements by teleoroentgenography or by the orthodiagraphic method and apply to them the formula of Hodges and Eyster. The stock clinical phrase "Heart normal in size, shape and position" is not enough. For like reason the companies are now asking that any electrocardiograms taken be forwarded for company inspection and interpretation.

The phrase "E.K.G. within normal limits" is not enough. Speaking of the electrocardiogram, insurance medicine is not yet prepared to affix mortality figures to the variations from the classical configuration. Although it has been collecting cases for a long time, it will be another two or three years before either the number of cases or the duration of observation is satisfactory.

The steps of mortality start from a point which we call "normal" or "standard." These are words which are in very frequent use indeed. Clinically they are somewhat vague and vary from authority to authority. In insurance medicine they are much more exact. To insurance, a "normal" man is one who upon investigation presents no impairment or impairments which add more than twenty per cent to the accepted standard mortality rate. A few companies extend that upper limit to twentyfive per cent. By far the majority of insurance applicants are "standard" risks within the strict limitations of my definition. The ratio is approximately four out of every five. That means that the examiner expends most of his labors on behalf of the companies on normal individuals. A defect in the formal teaching of the medical schools is that students are graduated with a splendid knowledge of pathological states but with grossly inadequate training upon "normal" people. I submit that graduates would be of much better quality were they required in their years of clinical study to examine not less than five hundred normals, critically and completely and to report their findings after pondering upon them. It is fortunate that life insurance can offer to the profession an opportunity golden in more senses than one to supply that knowledge of normal.

But insurance also deals extensively with those grades of impairment which do not commonly seek the clinician's aid. Most of insurance medicine may be said to be pre-clinical and post-clinical. It meets the blood pressure just a little elevated—say 142-90, and symptomless. It sees the man whose pulse has been irregular as long as he can remember, and the other fellow who is not exactly obese but just chubby. It knows the gastro-enterostomy case who hasn't seen the doctor in years but has occasional "indigestion." It does not see pneumonia cases or those acutely ill of other conditions until long since recovered and usually no longer under clinical observation. It is upon the more remote grades of illness or convalescence that insurance medicine spends most of its time

and upon them alone it claims the right to speak.

Business acumen has been a recessive trait among medical men. The heroes of the profession are remembered for their vast services to mankind and not for any commercial genius. Neither medical tradition nor medical training has much to say of economics, with the result that business considerations do not impress the average physician. He is reflexly alert and anxious in a medical emergency, but a business urgency leaves him unimpressed. I do not advocate that the theory and practice of business be taught in medical schools but certainly there could be no loss to the profession if every one recognized that in business there is dignity and ethics as idealistic and as binding as in the professions and serving the same purpose in safeguarding the rights and interests of all concerned. The business element looms larger in insurance medicine than it does in medical practice. Promptness is one of the first of business ethics.

Insurance introduces into the picture another individual—the life insurance agent. As a body these agents have undergone a remarkable evolution in the last few years and they are continuing it. With the expansion of life insurance in this country it became more complex, it served many more people and many more purposes. Its responsibilities were amplified manyfold. This progress increased the demand for men of real capacity and of technical knowledge. The demand fell upon the agency as well as the other ranks. Companies became careful whom they employed. The various state licensing laws promoted the selection still further. Courses became available, some of them under university auspices. A degree, that of Chartered Life Underwriter, was offered. It demanded an extensive course of study in a diversity of subjects followed by thorough investigation and rigid examination. The authorities have not hesitated to reject many candidates who have not measured up to a high standard. Most remarkable of all has been the evolution from within the ranks of the agents themselves. They have organized into local and state associations at the head of which is a single national body. Within the last few weeks this national body has adopted a code of business ethics for the regulation of every member and with the overwhelming support of the ranks, has undertaken to purge its numbers of any and all who will not or cannot comply. If you will read this code you will realize what this

forward step means for the insurance business.

Tomorrow the Kansas State Organization meets in this city. It will be my privilege to address them. I propose to tell them that those of their number who have studied, who have qualified for their degree, who are licensed and who subscribe to and observe the new ethical code have fulfilled all the requirements of formal professionalism and are professional people. I am going to tell them that that high status is justified only if they use their knowledge and their privileges in the service of the people of the State of Kansas. I shall tell them that among their professional interests must be that of mortality not only of Kansas policyholders but of Kansas citizens as a whole. They should learn the characteristics of disease, particularly of epidemic disease. They are to obtain their information only from authoritative sources, from the medical profession, from the public health authorities and from the magazine, Hygeia. In matters of public health welfare, they should be the right-hand men solidly behind the local health department. They will be valuable in the venereal disease campaign and in cancer control work. To you of the Kansas profession, I recommend that you use these life insurance men in these ways. They wield great influence among the right people in your community. They are experts in public relations and as a group they are well above the average.

But now let us return to life insurance medicine proper and note certain other practical peculiarities of it.

Let us say you are the examiner for some company and have been requested to examine an applicant. The matter of the place of examination often arises. The companies agree with you that your office is the proper locality. However, it occasionally occurs that the applicant cannot or will not come to the physician's office. Then Mohammed must go to the mountain and the physician doing insurance work must be prepared for this accommodation on occasion.

But you have been prompt in attending to this matter, thereby respecting a first principle of business ethics. Now you respect a second principle of business ethics to illustrate which let us picture you as a general practitioner pondering which of a number of thoroughly competent consultants you will select on behalf of a patient. Let us say you are well aware that one of the consultants as competent as any of them thinks particularly well of you and your

work and has a nice way of so telling your patients. That is an attitude and practice that will weigh heavily with you. Similarly it is a practice helpful to all concerned for the examiner to congratulate an applicant upon the purchase of life insurance and to express confidence in the particular company to which he is applying.

The next step consists in asking the applicant certain questions set forth on a form and recording the answers.

No doubt your first impression of a form is that it is a rigid, clumsy, stereotyped affair demanding attention to many questions completely alien to the case. If you but knew the history of the modern insurance blank, you would realize that it deserves a great deal of respect. It is the crystallization of nearly a century's experience of literally hundreds of insurance officials who spend their working lives on these reports. Each question asked, the wording, the very punctuation has in it a prodigious amount of experience and thought. It is pruned of everything not absolutely necessary, and it deserves your most careful attention to every detail. This form, particularly the question and answer part of it, is a legal document that in all probability will become an important part of a contract involving thousands of dollars. That is the why of the insistence that the precise answers of the applicant be recorded or at least that the wording bear his definite assent. That is also why every question must be answered separately and the whole signed by applicant and by the examiner as witness, and why any changes are to be initialed.

To a casual observer, what is happening between applicant and examiner bears a close resemblance to what happens between patient and doctor. A history is taken involving both the personal and the family stories; this is followed by a physical examination. But the acute physician senses a difference that is significant. He senses that the different motive bringing the applicant to him, is reflected in a different set of reactions to his questions and to the manipulations of the examination. The applicant is restrained in his statements and lacks the spontaneity characteristic of a patient. His confidence is often more difficult to obtain, sometimes it is impossible. His answers are more vague and briefer. For these reasons and others, we must abandon medicine's prejudice against the leading question so far as insurance work is concerned. We must recognize the diagnostic scrapheaps behind which applicants sometimes try to hide such as "indigestion," "rheumatism" and "nervousness." A query as to the precise symptoms is always enlightening. Be especially doubtful of the "routine health examination." However desirable the general adoption of health examinations would be, experience teaches that so far if the option lies wholly with the individual, he seldom seeks the examination unless there is some symptom or sign or fear motivating him.

You must not conclude from what I have said that the examiner is expected to be a sort of detective. As a matter of fact, clear-cut misrepresentation is comparatively rare. All that is asked is that the examiner recognize that reticence is characteristic of applicants and that he explore the possibilities of the leads he may develop as he explores the possibilities of a skin lesion or of an enlarged gland in a private patient.

Now comes the physical examination. Every applicant should be stripped to the waist. If this is not possible, a notation as to the circumstances and as to the degree of exposure effected should be made. With women, special care as to draping is necessary. They may take offense where in clinical practice there would be no objection. For the same season pelvic or rectal examination is rarely practical. If the pupillary reflex is very sluggish or absent, the observation should be repeated in a dark room, using an electric torch. Similarly re-enforcement should be tried with sluggish or absent knee jerks. In either case Romberg's test should be used along with the common simple coordination observations.

Mortality from cardiovascular disease is high and is increasing; therefore, observations of the heart and blood vessels are of special import-The commonest index for the heart size is the position of the apex. This must always be reported together with the method by which it has been found. If it is visible or palpable, the finding is more or less exact. If it must be determined by auscultation or percussion, the limits of error are great even in the most skilled hands.

In determining blood pressure, first pump the arm band pressure up to a high level, then let it fall, with the stethescope over the antecubital fossa. If you will do this routinely you will discover that the so-called ausculatory gap is not simply a text book curiosity and you will save yourself the mortification of missing some perilously high blood pressures.

I have not attempted to describe the examination. It is too familiar to you to do more than indicate some special points wherein experience shows that difficulty has been met. I do want to emphasize, however, that that high degree of skill which is at once thorough and all observing, yet shows in unhurried dispatch, is not lost either on the applicant nor on home office. Many an enviable practice has been based upon life insurance work.

The conclusion of the interview is a critical period and distinguishes the competent examiner as much as does the examination itself. Almost invariably the applicant or the agent or both inquire as to the insurability of the case. Now I have endeavored to indicate that the modern determination of insurability is a complex procedure. I counsel you to avoid the responsibility of attempting it. If you are placed squarely on the spot, you can point out that other considerations than physical ones also enter into the appraisal and that even in judging the various physical states the companies employ methods not used in clinical medicine. If you will observe this rule you will never be in the position of having used influence to prejudice an applicant against an insurance appraisal which in the light of modern specialized knowledge is eminently just and absolutely equitable. There are in this country thousands of dependents left inadequately provided for because a decedent refused modified insurance. Many of them refused it because kind hearted physicians, anxious to reassure them, but unfamiliar with modern insurance data and methods, assured them they were standard risks.

CONCLUSIONS

- 1. Aside from its substantial contributions to the economic status of the medical profession, insurance medicine has had an important if inconspicuous part in general medical progress. Of particular importance, among others, have been the studies in build, blood pressure, heart murmurs, various urinary impairments and peptic ulcer. In addition it has elaborated special laboratory procedures and methods and has joined in the advance of public health orthodoxy and in popularizing the routine health examination.
- 2. It is essentially a critical statistical medicine interested particularly in remote prognosis. It utilizes the group rather than the individual as the unit of mortality and within its limitations it is capable of determining its special

type of prognosis with relatively great accuracy.

3. It is concerned chiefly with normal individuals and with those presenting pre-clinical and post-clinical impairments; its field theremore is contiguous to rather than co-incidental with that of clinical medicine.

- 4. A definition of the term "normal" is given.
- 5. Business considerations are influential and a third party, the agent, is introduced. Agents are rapidly evolving toward a commendable professional status; they are concerned with mortality and can be valuable in carrying the message of public health to the people.
- 6. Some common difficulties and mistakes of the insurance medical examiner are discussed.

THE TREATMENT OF BREAST CANCER, A PRELIMINARY REPORT OF 205 CASES*

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Every physician knows that all breast cancers cannot be cured by the present methods of treatment. Every physician is equally aware of the fact that with proper education and vigilance on the part of both doctor and patient the percentage of cures may be greatly increased. Not until a specific cure is discovered will all cancers be curable. Cancer is a local disease in its beginning and may be curable at that stage. But it is human to be careless, neglectful, fearful and unbelieving, causing delay in the treatment of cancer until it is no longer a local disease. Even if every prospective cancer patient and every physician were endowed with superlative intelligence there would still be cancers of the breast develop to the stage of incurability before detection because of their insidious onset and growth and lack of symptoms. It is a great misfortune that all cancers are not accompanied by unbearable pain from their incipiency. Pain is feared and respected more than tumor.

There is no serious disagreement among scientific physicians concerning the general treatment of breast cancer; all agreeing that surgery and radiation therapy are the only methods worth considering at present. There is an honest difference of opinion concerning the rel-

^{*}Presented before the 78th Annual Session of The Kansas Medical Society, May 5, 1937. †University of Kansas School of Medicine, Kansas City.

ative value of operative and radium or x-rav treatment. After reviewing the recent discussions of the subject one must conclude that the number of physicians, surgeons, and radiologists advocating a sensible combination of the two treatments is increasing. In a recent study, Perry¹ tabulated the opinions of 192 radiologists, seventy-nine surgeons and 120 internists and general practitioners concerning their choice of treatment of breast cancer. Eighty-three per cent of the radiologists favored both surgery and radiation therapy, ninetytwo per cent of the surgeons expressed a preference for some type of radiation therapy in addition to surgery and eighty per cent of the internists and general practitioners preferred both methods of treatment. Recent statistical studies comparing the relative value of surgery alone and surgery combined with radiation therapy have been made by Hintze², Adair³, Portmann⁴, and Pfahler⁵. These authors all agree that a greater number of five year cures are obtained by the use of both methods of treatment. Adair³ records the rather remarkable finding that thirty-three per cent of his cases proven to be cancer by biopsy, treated by radiation and later subjected to operation, failed to show evidence of cancer in the breast when the tissue was examined by the pathologist. Such observations clearly indicate the destructive effect of properly applied radiation to breast cancer.

Little has been added to the technic of the radical operation for breast cancer since the work of Halsted more than forty years ago. On the other hand there has been a constant improvement in the technic and efficiency of radiation therapy in recent years. Because of this improvement the results of x-ray and radium treatment of a decade ago cannot logically be compared with more recent treatment. In the present state of our knowledge we must therefore look to earlier diagnosis and the modern increased efficiency of radiation therapy to increase breast cancer cures.

The following preliminary report of the treatment of 205 cases of carcinoma of the breast at the University of Kansas Hospital is presented to outline the problem as we see it in a general hospital. All patients presenting themselves at the Hospital or Out Patient Department are included. They all have received treatment except those with disease far advanced and obviously hopeless and those refusing treatment. Patients with local and distant metastases were treated by x-ray to relieve pain and

with the hope that life might be prolonged. It has been considered good judgment to treat all patients desiring treatment. To refuse patients treatment who are still hopeful of improvement would lead to needless discouragement and drive some of them to quacks.

For purposes of study we have adopted the following clinical classification of hospital patients as they appear for treatment:

Group 1—Tumor found in breast only. Group 2—Tumor in breast with auxiliary metastases.

Group 3—Tumor in breast with distant metastases.

Group 4—Hopeless cases.

Groups one and two have all been treated by operation and some with x-ray. Patients have been properly placed in these two groups after receiving the pathologist's report on the tissue removed at operation. Group three has received x-ray treatment only except in a few instances when an ulcerating mass has been removed as a palliative measure. In group three are placed all cases having skin nodules, involvement of supraclavicular nodes or x-ray evidence of deep metastases. The group four patients have not been treated. The total number of patients is classified in Table I.

Dead	tients tients
205 Classification in gr	collec
Group 1	-
Group 2	

Table I.

Group 1	45
Group 2	
Group 3	
Group 4	36
Out Patients (not classified)	

205

It may be noted that there are 113 patients in group one and two who have been suitable for operation. The fifty-five patients in group three and four were considered incurable on admission to the hospital. There were 113 or sixty-seven per cent in which there was a possible chance of a five year cure. Of the thirty-seven out patients, twenty-four had been operated upon elsewhere. With possibly two exceptions this entire group was considered incurable when first seen. They all received x-ray

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therapy. If the entire group of 205 patients is considered, approximately forty-five per cent were judged incurable when first examined in the hospital or out-patient clinic.

In reviewing the results of treatment of hospital patients only those patients treated prior to May, 1932, or five years ago, are considered. The results of treatment are shown in Table II.

Table II.

Hospital patients treated from 1921 to May, 1932.

Total number surviving 5 years =

17 of 73 treated or 23.2%

Total number alive after 5 years =

12 of 73 treated or 16.4%

Treated by surgery only—

37— 6 survived 5 years or 16.2%

Treated by surgery and x-ray—

36—11 survived 5 years or 30.5 %

The results in this small series show a lower percentage of five year survivals than is usually reported in recent literature. However, it compares favorably with the average recorded by Portmann⁶ from thirty-two surgical clinics prior to 1928. In this group the five year survivals varied from fifteen and nine-tenths per cent to fifty-two and one-tenth per cent with an average of twenty-eight and eight-tenths per cent. It would appear from our results that surgery combined with x-ray therapy is much superior treatment to surgery alone. We believe that the value which might be attributed to x-ray therapy is more apparent than real since some of the early treatments were wholly inadequate in the light of present day methods. However, the figures are so strikingly favorable to the combined treatment that we feel justified in advising such therapy without hesitation. By the use of pre or post-operative x-ray treatments we have definitely decreased the incidence of local skin recurrences and ulcerration.

DISCUSSION

Statistics are notoriously unreliable in attempting to accurately evaluate any treatment of breast carcinoma. However, there appears to be no better method to arrive at relative values of such treatment. To judge statistics without some knowledge of the natural history of the disease often presents a misleading picture of the true facts. In prognosticating the length of life in an individual case anyone with experience knows that many factors such as age, physiological activity of the breast, type of tumor and the apparent natural resistance of some patients must be taken into consideration. Pfahler's⁵ observations that ninety-three per cent of recurrences appear within the five year period following treatment indicates that no shorter period should be considered as remotely representing the possibility of permanent cure. Since the average length of life of the untreated carcinoma of the breast is approximately three years from the time of discovery of the lesion it is obvious the so-called three year cures mean nothing. In an analysis of 651 untreated cases, Lazarus-Barlow⁷ found that twelve per cent survived five years. It is therefore apparent that only the percentage of five year survivals over and above twelve per cent can be attributed to treatment.

The treatment of potentially curable patients is only a part of our problem. Since almost half of the patients presenting themselves for treatment are considered incurable, the best method of handling such patients is worthy of careful consideration. It is our definite belief that life can be prolonged in a majority of these patients by adequate x-ray treatment. The relief of pain following the treatment of bone metastases is sufficient justification for radiation therapy. No patient has been denied treatment in recent years except the very advanced hopeless cases.

Our method of choice at present for the treatment of the operable cases is to remove a small portion of the tumor or the entire local tumor for pathologic study followed immediately by x-ray therapy. After the expiration of eight to ten weeks the radical breast operation is done. All patients are followed after operation as long as they live. For the first two years they are seen every few months and postoperative radiation is given as indicated throughout the period of observation. Patients considered cured are contacted at least once each year and their condition carefully observed.

CONCLUSION

1. A preliminary report of 205 cases of carcinoma of the breast seen at the University of Kansas Hospitals is presented.

2. The proper care and treatment of the definitely incurable group of cases presents quite as great a problem as the potentially curable.

3. All patients are given treatment regardless of stage of the disease if there is any possibility of prolonging life or relieving pain.

4. Our series of cases, while relatively small, indicates that the combined treatment with surgery and radiation gives the highest percentage of five year survivals.

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No. 5.

AN ANOMALOUS DIGASTRIC MUSCLE

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Although variations in the anterior belly of the digastric muscle have been described rather frequently since the first third of the eighteenth century, the case described here is such a beautiful example of a rather unusual type that the publication of a brief description seems warranted.

No review of the literature will be attempted for Zlabek ('33) has published an excellent summary and an extensive bibliography. Several classifications of the anomalies of this muscle have been given. One of the latest classifications is given by Zlabek and according to his classification the anomaly described here is type IV, subtype delta.

Our case was found in a female eighty-four

years of age, who died of chronic myocarditis. The body was in good condition and was received in the summer of 1934. The body was kept in a storage tank in phenol solution until it was removed to the dissecting room last September. The body has been found to be normal in all respects except for a prolapsed uterus.

The accompanying drawing gives a good idea of this anomaly. Both posterior bellies and the attachments to the hyoid bone were normal. The underlying mylohyoid muscle was normal in every respect. The two normal bellies of the digastric muscles each had a maximum width of 11 millimeters with normal attachments into the digastric fossae of the mandible. The slip, or extra anterior belly, starting from the right side and crossing to insert with the anterior belly of the left digastric on the mandible had a maximum width of 6.5 millimeters and the slip coming from the opposite side and inserting with the normal anterior belly of the right digastric was 5.8 millimeters in maximum width. The slip from the left side was inclosed at the intersection in the midline by the extra belly from the digastric muscle of the opposite side. The fibers interdigitated a little more than is shown in the drawing, although most of the fibers of the left slip passed through together. The part of the right extra anterior belly passing inferior or superficial to the left extra belly had a width of 3.7 millimeters. The intersection of the two anomalous bellies was 7.6 millimeters above the superior border of the hyoid bone. The total distance from hyoid bone to symphysis mandibulae was 27.3 millimeters. Each



Fig. 1.—Illustration of Anomalous Digastric Muscle.

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extra belly attached in a common tendon with the muscle of the opposite side in a normal digastric fossa on the mandible. There was no connection between any part of either digastric muscle and the mylohyoid muscle, as is so frequently the case in these anomalies.

Dratsch ('30) describes a case in a male cadaver thirty-five to forty years old but with only one extra anterior belly crossing to its attachment with the normal anterior belly of the opposite side. Stracker ('08) says that the crossing of the extra anterior bellies is an unusual form of anomalous digastric muscle and that it is found less frequently in females. Parsons ('98) thinks that the anterior belly is older phylogenetically than the posterior belly, "or in other words that the anterior belly is differentiated from the mylohyoid layer before the posterior belly is split off from the stylohyoid. This possibly may be the reason why the absence of the anterior belly of the digastric is very rare in man, but the absence of the stylohyoid is fairly common."

This anomaly probably made no physiological difference to its owner and it is of little surgical significance, but because of its striking appearance, and its rare type, it seems best to record it.

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Fig. 1. Showing the extra slips of the anterior bellies of the two anomalous digastric muscles crossing to insert with the bellies of the opposite side.

the opposite side.

THE TREATMENT OF GENERAL PARESIS*

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It is our purpose to consider the treatment of paresis, and to present some of the better plans of treatment which are practical and available for the use of the general practitioner as well as the specialist.

Early diagnosis is obviously of prime importance in the treatment of paresis. It is imperative that we mention and emphasize the importance of early diagnosis even though this is to a

variable degree appreciated by everyone engaged in the practice of medicine. Menzies¹, among many others, has recently stressed the importance of early diagnosis in the treatment of central nervous system syphilis. He makes the statement that every patient with syphilis past the primary stage should have a lumbar puncture. While this statement is occasionally made, we fear that such a measure is being adopted all too slowly by those of us engaged in the actual treatment of syphilis. We must appreciate at all times that neurosyphilis is a manifestation of acute syphilis and manage our patients and their treatment accordingly.

The early diagnosis of syphilis falls almost wholly, if not exclusively, on the man engaged in general practice. His responsibility here, as on many occasions, is great. We are cognizant of claims made to the effect that syphilis is rarely seen in certain clinics or by those who enjoy a selected practice. Such claims are based on opinions, not facts. Such an attitude will result inevitably in failure to diagnose syphilis early. Although the diagnosis of the advanced case of paresis is not difficult the diagnosis of the early case is fraught with many hazards. It is not radical to favor and insist upon lumbar puncture in doubtful cases. On the contrary, it is evidence of good medical judgment. In the untreated case, serology is most valuable as a diagnostic measure. A patient is at all times entitled to the advantages afforded by lumbar puncture if there is a possibility of paresis. The serological study should include those tests that are of established value in the study of spinal fluid. The importance of serology is well illustrated in the summary of Case I.

If and when lumbar puncture is used when indicated, and all syphilitics given continuous adequate treatment, then we will have fewer admissions to state hospitals. During the two year period ending July 1, 1936, eleven and forty-seven hundredths per cent (forty men and twenty-two women) of the first admissions to the Osawatomie State Hospital were paretics. In considering patients admitted for institutional care we face pertinent facts. First, in a large per cent of the cases, neither the patient nor the home physician has had any suspicion of the disease. It follows that the patient has had either no treatment or inadequate treatment. A second fact follows from, or is a part of, the first, namely, that a high per cent of the paretics admitted to state hospitals are badly deteriorated at the time of admission. While

^{*}Presented before the Crawford County Medical Society at Pittsburg, October 29, 1936.

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these facts are discouraging, so far as probable end-results of treatment are concerned, these same facts should be a powerful incentive to the home physicians to treat their cases early, continuously, intelligently and persistently.

At the present time it is generally accepted that some combination of fever therapy and tryparsamide supplemented by bismuth when indicated constitutes the best form of treatment for paresis. As will be pointed out, there may also be a place for the arsphenamines in a carefully planned treatment program. The iodides, long used empirically, still have a place in the treatment of syphilis.

There is little to be gained by taking a radical stand on the preferable form of fever therapy. Many forms have been used. These include malaria, diathermy, rat-bite fever, intravenous typhoid, sulphur in oil, and others. Except in large institutions with ample funds and a well trained personnel the various forms of diathermy are relatively impractical. When diathermy is available we have yet to consider the question of the discomfort of the patient, occasional burns with certain kinds of apparatus and occasional fatalities. Advantages include control of the height and duration of the fever, a constant source of fever, and the fact that a source of fever therapy is available for those immune to malaria, and so forth. In considering end results, there is no known available data to indicate that these are better following diathermy than following malaria. Even the most favorable statistics on cases treated by diathermy support this view. The extreme contrast of Neymann's² report of complete remissions in thirty per cent of the cases in a series of 544 cases treated, with that of Freeman³ and his associates, who obtained no complete remissions in a series of fifty cases, is of interest. A more recent report by Fong⁴ on the Freeman series of fifty cases after the expiration of an additional three year period of observation concludes that "the results to date are not absolutely convincing as to the reliability of this method (diathermy) of producing hyperpyrexia in paretic patients." This conclusion is in contrast with a recent report by Neymann⁵ who in 1935 condensed the important published reports on the use of electropyrexia in the treatment of paresis and believes that "the sum total of all these results warrants the conclusion that electropyrexia is one of the most valuable modern aids in the treatment of dementia paralytica." He attributes the beneficial results in such cases "not only to the destruction of the treponemas and the response of the reticulo-endothelial system, but also to the generalized vasodilatation which always accompanies electropyrexia."

We must also consider the question of recurrence following treatment. The opinion has been expressed that there is a relatively higher incidence of relapse following diathermy than following malaria. This opinion has at least in a measure been confirmed.

A recent plan, mentioned particularly by Strecker and Ebaugh⁶ is to produce fever by means of the Kettering hypertherm. This method would seem to merit consideration and at this time appears to be a preferable form of diathermy.

The use of typhoid vaccine intravenously for the production of fever has certain attractive features for the man in general practice. A satisfactory procedure is to use suitable dilutions of vaccine and start with an initial injection of fifty million killed bacteria. If only a slight reaction is obtained a second injection of the same size or smaller may be made two hours following the initial injection. It is not difficult to obtain a temperature of 102 or 103 and with care higher temperatures may be reached. Beckmann⁷ considers the use of typhoid vaccine intravenously as the choice method of fever therapy for the average general practitioner.

The use of sulphur for the production of fever is discussed by Mackay⁸. He regards this method superior to malaria in many ways. According to his report a prolonged elevation of temperature is obtained, an average reaction being a temperature above 102 for twenty to thirty hours. From this he believes that one or two injections of sulphur should equal ten injections of typhoid vaccine. There is a resultant leukocytosis and frequently considerable local pain.

We have had no personal experience with this plan of treatment.

At the present time we advocate the immediate inoculation of all paretics with malaria. We believe that inoculation should be made as soon as possible after the diagnosis has been established if there are no contra-indictions.

The present opinion regarding the mode of action of malaria is concisely presented in an opinion expressed by Dennie and McBride⁹ and concurred with by Moore¹⁰ in his statement: "The effect of malaria is to reactivate the defense mechanism and to enhance the value of subsequent treatment."

Recently, Wagner-Jauregg¹¹ points out the "specific affinity which malaria, just like other infections, but in a much higher degree, has for the reticulo-endothelial system" and comments further that "in cases of malaria treatment with advantageous effect the brain-parenchyma of paralytics attains a capacity to react against the syphilitic infection, which is similar to the capacity which this organ in the majority of syphilitics has in the secondary period. During the further progress of healing this capacity of resistance extends to the mesodermal tissue of the central nervous system also the other tissues acquire this faculty of resistance."

The greatest drawback about malaria is to have some on hand when it is needed. With proper management this is a minor problem in state hospital work but may be, and frequently is, a big problem in private practice. However, it is not an insurmountable problem. Malaria can be used wherever the services of a trained nurse are available, although hospitalization is to be desired. It is perhaps worthy of mention that citrated malarial blood may be transported by mail or otherwise. It will remain infectious for a minimum of twenty-four hours if extremes of temperature are avoided. We believe it is important to use only the minimal amount of citrate required to prevent coagulation. It seems that more than one c.c. of a two and five tenths per cent solution of sodium citrate per nine c.c. of blood renders the inoculum relatively less infectious.

The malarial blood may be injected intravenously, intramuscularly, subcutaneously, or intracutaneously. We have used the intravenous route most and use three or four c.c. of donors blood regardless of the blood type. More than five c.c. of blood is considered unsafe unless the blood of the donor and recipient have been typed and shown to be compatible. The main advantage of the intravenous route is a shorter incubation period. In the intramuscular injection we usually use either the triceps or the gluteal muscles. We use this method when a longer period of incubation is desirable and particularly when we are trying to "keep the strain going" so that we will always have malaria available. We have had little experience with subcutaneous inoculation. According to Strecker and Ebaugh¹² inoculation is "best affected subcutaneously or intracutaneously since these methods tend to favor the production of the tertian pattern''.

We have used adrenalin subcutaneously and intravenous typhoid or calcium gluconate in an

effort to bring on paroxysms when they were delayed. These measures are occasionally of some value.

Following an incubation that is usually from five to seven days if intravenous inoculation is used the patient has fever, frequently preceded by chills. The temperature will often show a slight elevation daily or every other day shortly before the first paroxysm. During the incubation period the patient is ambulatory and carries out his usual activities. Bed rest is instituted as soon as the temperature reaches 101 degrees F. During the period of treatment, food is given as desired with the exception that any meal coming at the height of a fever is omitted. Urine is checked periodically and blood count and hemoglobin determination is made at regular intervals. During the chill the patient is provided with plenty of hot water bottles and blankets. A tepid sponge is used if the temperature goes over 106. Blood pressure is taken and recorded daily, between paroxysms.

During the incubation period the temperature is taken and recorded regularly every four hours. After the onset of the paroxysms we take the temperature every two hours. During a paroxysm we take the temperature and pulse every thirty minutes until the temperature drops to below 103. We do not awaken a patient for a temperature below 103 during the eight hours immediately following a paroxysm. We prefer and use rectal temperatures.

Nurses are instructed to report to the physician promptly a temperature over 106 degrees; persistent nausea and vomiting; a persistent elevation of pulse above 120 during the afebrile period, or rapid exhaustion. Impending circulatory collapse as evidenced by a lowered or a progressive lowering of the blood pressure and an increased pulse-rate demands immediate action. A severe anemia may occur. Any of the above complications may necessitate the interruption of malaria. If so, the paroxysms are terminated by quinine. We usually give quinine sulfate grs. X tid for three days and then grs. X once daily for two weeks. With the strain of malaria we have used, the paroxysms are interrupted temporarily by the administration of a single dose of two or three grains of quinine. Following this the patient usually has three to five paroxysm-free days, after which the fever sets in again. We ordinarily get a patient up about a week after the last paroxysm and give immediately neoarsphenamine at five to seven day intervals. We start with 0.3 gm. and work up to 0.6 gm. for the last three or four doses. We give four to six injections of neoarsphenamine. The neoarsphenamine is followed immediately by tryparsamide.

We have profitably followed Moore's¹³ general plan of treatment and also his recommendation of eight to twelve paroxysms. If, for any reason, it is necessary to terminate malaria early, the patient may be reinoculated providing this is done within three months of the initial relapse. Case I points out the results obtained on a case treated recently.

Contra-indications for malaria are covered by Strecker and Ebaugh's 14 list of (a) galloping paresis, (b) any severe cachexia or profound systemic disease, and (c) cardiac or aortic disease. In one sense of the word these are, after all, relative contra-indications, as there is everything to gain and nothing to lose so far as a paretic is concerned by giving malaria. Cases II and III illustrate our point. It is doubtless true that it is "generally useless" to give malaria in the face of contra-indications but at the same time we feel obliged to offer a paretic whatever chance may be had from active treatment. If we do this our statistics suffer, but once in a while a patient is benefitted. We regularly advise the family of the unfavorable prognosis before starting treatment.

CASE SUMMARIES

Case I. G. J. (Hospital No. 15581): Patient was admitted to the Osawatomie State Hospital, February 26, 1936. She was transferred from the Women's Industrial Farm at Lansing. The history in this case was quite inadequate. There was no history of venereal disease. There was no history of treatment prior to her admission. She was twenty-five years of age. She had two children, one six and one eight, by her first husband. On admission she was rather talkative, noticeably irritable, rather impudent, and quite resentful at the authorities because she was sent to the hospital. Physical examination was essentially negative. There was a slight slurring of the speech and pupils were sluggish. Mental examination was essentially negative. She exhibited no delusions or hallucinations but did exhibit rather poor judgment, lack of a sense of responsibility, and a relatively asocial conduct. She was satisfactorily oriented, memory and insight were good. Serology revealed: Blood, Kahn negative, Kolmer negative; spinal fluid, Kahn 4 plus, Kolmer 4 plus, Colloidal Gold 5-5-5-5-5-4-2-1-0-0. She was inoculated with malaria on the first of March and had her first paroxysm on the seventh of March. There followed a daily paroxysm with the temperature going to 104 or 105 daily. On the fourth day she complained of some pain in the chest. Following this, there was a gradual elevation of the pulse rate and on the sixth day, she developed a few petechial hemorrhages in the legs. She spent an uncomfortable night and because of her unfavorable condition, quinine was given. The malaria was interrupted immediately and she had no subsequent chills.

Following this, her general physical condition improved and she was again inoculated on the second of April. She had her first definite elevation of temperature on the twelfth of April, the eleventh day, and her first definite paroxysm on the fourteenth, her temperature reaching a maximum of 105.8. remaining above 103 for four hours and a half. The second paroxysm occurred the next day with a maximum temperature of 104.4 and the third occurred the following day with a maximum temperature of 106.4. Wth this paroxysm the temperature was above 103 for only three hours. The maximum temperature on the next day was 100.6, and there occurred no subsequent paroxysms. The fever had aborted spontaneously. The last paroxysm occurred on the sixteenth of April. She subsequently received neoarsphenamine during the rest of April, during the month of May and into June, receiving altogether nine injections. Serology on the eleventh of May was entirely negative. Treatment was continued in spite of the negative serology, and the serology was again checked on July 14th. This time it was again entirely negative. This is a case in which complete reversal of positive serology was obtained following only malaria and neoarsphenamine.

Case II. M.H. (Hospital No. 15658): Patient was admitted to the Osawatomie State Hospital May 26, 1936. He was forty-two years of age at the time of admission. There was an indefinite history of chancre; detailed information regarding the duration of the infection or treatment prior to admission was not available. At the time of admission physical examination was essentially negative. The patient was well nourished, blood pressure was 115/70; reflexes were sluggish; the pupilliary reaction was sluggish to light; serology was as follows: Blood, Kahn 4 plus, Kolmer, 4 plus; spinal fluid. Kahn 4 plus, Kolmer 4 plus, Colloidal Gold 5-5-5-4-4-2-2-1-0-0.

He was noisy, combative and profane. He exhibited extreme mental deterioration and was unable to give intelligent answers to simple questions. He had numerous bizarre delusions. There was marked impairment of insight and judgment. He lost ground rapidly. Because of his extreme deterioration and the relatively rapid progress of the disease, inoculation with malaria was not made. Chemotherapy was started, but in spite of this treatment the patient lost ground steadily and on the twentieth of June. started having convulsions. He continued having convulsions, three the first day, six the next day, and died early the next morning, the morning of June 22. Looking back, we would be inclined to feel that the outcome could not have been less favorable even though the patient had been inoculated with malaria.

Case III. J. Y. (Hospital No. 15734): Patient was admitted to the Osawatomie State Hospital August 27, 1936. He is a white male, thirty-eight years of age. He had a primary lesion in 1915 "for which he received insufficient and poor treatment, about twenty intravenous shots and a few hip shots". During the three months immediately preceding commitment, this patient showed marked changes of personality. He became grandiose, showed poor judgment, and was forgetful. Physical examination at the time of admission disclosed an obese male, who was apparently in good physical condition. The pupils were unequal and fixed, there was considerable slurring of speech.

Serology showed: Blood, Kahn 4 plus, Kolmer 4 plus; spinal fluid, Kahn negative, Kolmer 4 plus; Colloidal Gold 0-0-0-1-1-1-0-0-0. In the mental examination we find that the patient is a jolly, sociable, cooperative individual who is quite confused and poorly oriented. He is evasive and has had nocturnal auditory hallucinations. His memory for recent past is good except for the fact that he does not remember events that happened during the period following the convulsive seizures on August 19. He has good insight and fair judgment. He had been inoculated for malaria shortly before his admission to the hospital. On the eighth day of his hospital residence, he had his first malarial paroxysm and there ensued eleven additional paroxysms before the malaria aborted spontaneously. Patient's physical condition remained good throughout the course, although he lost some weight. There occurred definite improvement in his mental condition even during the course of fever. He had his last malarial paroxysm on the twenty-second of September. Following this he was kept in bed for a short time, and chemotherapy started. He was paroled on the fourth of October with the understanding that he would receive continuous intensive chemotherapy from his home physician. We saw this patient on the twenty-sixth of October and he appeared to be in excellent mental and physical condition. Serology was not obtained at the time of parole.

Final results in the treatment of paresis will in the end depend to a large extent upon the type of treatment that follows the fever therapy. The value of neoarsphenamine as a tonic immediately after fever therapy has been pointed out. Other than this, the arsphenamines have no place in the treatment of paresis. While the value of the arsphenamines is well established in the treatment of early syphilis, they are surprisingly inadequate in the treatment of paresis. In paresis it is best to depend on tryparsamide and the heavy metals so far as chemotherapy is concerned.

Tryparsamide should be administered in the treatment of paresis over a long period of time. This drug in combination with bismuth offers a good plan of treatment and one that is available to every general practitioner. Tryparsamide is recognized as the drug of choice in the treatment of paresis but because it is at best only mildly spirocheticidal it should not be used in early syphilis. It should be mentioned that recently Campbell¹⁵ has pointed out that tryparsamide may have a place in such a regime in the sense that it is a preventive measure against the later onset of paresis just as malaria is thought by some to be.

The big bug-bear about tryparsamide is the danger and occasional occurrence of optic atrophy. It is advisable to make an ophthal-moscopic examination and check visual acuity and visual fields before starting tryparsamide

therapy. We must constantly be alert for eye symptoms during a course of treatment. Tryparsamide is a pleasant drug to use and does as little damage to the vessel wall as any drug that we have used. The contrast with mapharsen in this respect has been quite noteworthy. We give an initial dose of one and five tenths grams of tryparsamide and continue with three grams weekly for a long period of time. In an early case improvement will ordinarily occur and the patient's response to treatment will decide how long we will continue treatment. Cases have been recorded where as many as 350 injections of tryparsamide have been given. Tryparsamide is an excellent tonic, and after its administration there is usually a pronounced gain in weight and strength. Tryparsamide can be used in extreme states of debility where it may be unwise to use malaria or other forms of fever therapy.

Solomon and Epstein¹⁶ have recently obtained striking results in a series of twenty-one cases "therapeutically recalcitrant" to tryparsamide by giving fever therapy and then following it with more tryparsamide. These authors submit comparisons which indicate, "a marked superiority in clinical results of the treatment sequence of tryparsamide followed by malaria over tryparsamide alone, malaria alone, or the sequence of malaria followed by tryparsamide The effect on the cerebrospinal fluid in this group is equally impressive."

We have little comment to make on the use of the heavy metals. We use bismuth more than mercury. We prefer a product that has a high bismuth content.

Mapharsen has in our experience been disappointing in the treatment of paresis. We await with interest reports on this drug. Gruhzit and his associates¹⁷ have recently reported results obtained with mapharsen in a large series of cases. The possibility of involvement of the central nervous system was checked in only a few cases and the results obtained consequently throw little light on the value of mapharsen in the treatment of paresis.

In regard to results obtained in the treatment of paresis, we choose rather than to present more statistics or comment on our own statistics to quote Hutchings¹⁸, who says, "Frederick Peterson stated in 1903 that he never knew a paretic to recover and that the average duration of life was three to five years ... now one-half the paretics admitted are out of the hospital in three years and the

(Continued on page 309)

PRESIDENT'S PAGE

To the Members of the Kansas Medical Society:

During the past forty years it has been my pleasure to attend many meetings of the American Medical Association, but at the convention in Atlantic City I was first privileged to attend all the sessions of the House of Delegates. It is an amazing and interesting sight to see the representatives of organized medicine at work. The House is composed of one hundred seventy-four members, of which one hundred seventy answered the roll call. Each state is entitled to one delegate, with an additional delegate for each eight hundred twenty-five members or part thereof, over the first eight hundred twenty-five. The meetings are not presided over by the President of the American Medical Association but by a speaker elected each year from the house membership. The Speaker during the past two years has been Dr. Nathen Van Etten, who is an especially kind and considerate presiding officer but firm and decisive in his rulings.

In looking over this body, one is impressed with the high type of its members. I presume that there are few legislative bodies which can measure up to the high standard of our House of Delegates in intellect, education, or intensity and idealism of purpose. Many have been members for years, which makes for the greatest efficiency.

The House was in session daily during the five days of the meeting, considering first committee reports and discussions and later amendments and resolutions. The business of this body is carried on in much the same manner as that of our state House of Delegates. The majority of the matters under discussion here were concerned with the economic problems which now confront medicine, just as the same problems have chiefly concerned our state society for the past three or four years. The high spot of the sessions was the speech of Hon. J. Hamilton Lewis. United States Senator from Illinois, which is printed in the June 26. issue of the Journal of the American Medical Association. This old political warrior, feeble, but with a keen mind and an alert eye, very courteously presented his message, which was of such concern to us that a special meeting of the House of Delegates may be called by the Board of Trustees in the near future to take action on his proposals. It is advisable for each of you to read his speech carefully.

Those of us who attended the meeting returned with certain definite impressions. The business of the American Medical Association is conducted by committees, similar to our state committees, assisted by the paid officers of the Association. Their problems are our problems. It was satisfying to realize that the affairs of Anerican Medicine are in the able and experienced hands of men who are earnest and unafraid.

J. F. Gsell. M.D., President.

EDITORIAL

NEW SECRETARY

The Kansas State Board of Health announced recently that it had employed Dr. F. P. Helm to succeed Dr. Earle G. Brown as Secretary of that organization.

Dr. Helm is a graduate of the University of Louisville School of Medicine and has been engaged in public health work since he graduated in 1923. He has lived in Topeka during the past five years where he has been employed as city health officer. Prior to coming to Topeka he lived in Miami, Oklahoma, where he was county health officer for a number of years. Dr. Helm will assume his new duties effective July 15.

The Board is to be congratulated for its good fortune in securing Dr. Helm. He has had a large amount of experience in this type of work and it is believed that the entire profession of the state will hold him with the same high regard which he has received from Shawnee County Medical Society.

ATLANTIC CITY IN THE NEWS

The Atlantic City session of the American Medical Association passed all previous atendance records and, according to the Journal of the A. M. A., there has never before been such a wealth of material in the presented papers and scientific exhibits.

The rapid growth of interest in medical affairs on the part of the general public was reflected in the appearance at this session of a veritable deluge of newspaper reporters and magazine representatives. Time, News Week and Life were particularly interested in the news features developed during the session. From the reporting of the great dailies, the weeklies and the Associated Press, the public received a smattering of information. The press, always interested in personalities and in news that carries a thrill, gave a good deal of space to the appearance on the program of Senator J. Hamil-

ton Lewis, of Illinois, who brought an authorized message from the President of the United States.

The assumption of the press on hearing the speech of the colorful Senator Lewis is that socialized medicine is bound to come. The public is led to believe that organized medicine is opposing the extension of medical service to those who have no money to pay for it. Physicians who have given thought to this problem well know that it is going to be necessary to spread out medical service in order to reach larger masses of people who are not now getting proper medical attention.

Socialized medicine, as it is understood to mean the regimentation of the medical profession by a bureau of government on the basis of political alignment, is one thing, and the socialization of medicine which should be in keeping with the aims of the medical profession and the advancement of its cultural value for the benefit of the entire population, is quite another thing.

The medical profession has very definite social aims. These aims are being carried forward according to well thought out plans in the face of wide economic and social disorder. Organized medicine is not fighting to maintain a position of status quo. It is proceeding in well informed, watchful and militant endeavor to preserve its identity and scientific incentives. Its constant thought is the protection of the public against political maneuvering which would result in disorganization rather than facilitate the amplification of medical service.

THE SALES TAX

Completion of the first month's operation under the Kansas Sales Tax makes it timely to consider the obligation of the medical profession thereunder both as members of the profession and as citizens of the state.

Sales taxes, at best, entail many inconveniences, complications, and difficulties. This is necessarily true by reason of the numerous

transactions and various methods of commerce they effect. It should be remembered, though, that they offer one of the most equitable taxes which have as yet been devised. Everyone pays tax thereunder, and he who buys a great deal pays a great deal and he who buys little pays little. The sales tax theory is also of interest to Kansans from the standpoint that it represents a tendency away from adding further burdens to ad valorem and income taxes.

The Kansas medical profession is grateful to the Kansas Tax Commission for the assistance it received in obtaining rules and regulations under the sales tax which are believed to be easily operable and practical. The representatives of the Society who handled interviews with the Commission toward that end, realizing that this group of three men and a limited number of associates were forced to give similar interviews to almost every other line of industry in the state, marveled greatly at the time and courtesy the Commission gave in this interest and at the efficiency with which it handled this yast task.

The simplicity of the system under which medicine will operate is easily explained. A physician is deemed to be a consumer of all tangible personal property which he utilizes in conjunction with the rendering of his professional services. As a consumer he pays tax to his suppliers and, therefore, is not required to collect tokens from patients, keep records, or make remittance to the Commission. This is true, regardless of the value or kind of products used, or whether or not materials and service are separately billed to patients. The physician's only obligation, therefore, is to make certain that all of his invoices and statements for merchandise purchased include payment of the two per cent tax, and his only opportunity for difficulty is the commodities he purchases out-of-state or those which he might sell separate and apart from the rendering of professional services. In the instance of out-of-state purchases the physician should insist that his supplier make remittance of the tax, as his agent, and in the event this is impossible the physician

must always remember to do so himself. Few physicians make sales separate and apart from the rendering of service, but where this is done it is important that a tax certificate be secured and that direct remittance be made to the Commission.

The Commission is charged with responsibility for seeing that the tax intended by law is collected. Thus it is privileged to continue only rules and regulations which will accomplish that end. This obviously means that the continuance of the rule affecting physicians is largely dependent upon the profession alone. If experience shows that the rule produces a just amount of tax return it will undoubtedly be continued, and otherwise, it is probable that a change will be made wherein each physician will be considered a retailer and held accountable for keeping records of every grain of morphine he administers, every ampoule he uses, etc. It is believed, therefore, that the public, the Commission, and the profession can be saved much difficulty if each and every physician will adopt and pursue closely the following three rules:

That he will make certain all of his invoices show tax payments; that he will not buy out-of-state unless his supplier can show that the tax is being satisfactorily handled; and that he will not under any circumstances, sell drugs or other supplies separate and apart from the rendering of professional service.

THE AMERICAN BOARD OF SURGERY

The American Board of Surgery has issued an announcement in the form of a booklet of information which should be of interest to Kansas surgeons. This announcement gives a brief historical sketch of the organization of the Board and states its two-fold purpose of certifying those found to be qualified after meeting reasonable requirements and of improving existing opportunities for the training of specialists within the surgical field.

The Board has as Chairman, Dr. Everts A. Graham, Vice-Chairman, Dr. Allen O. Whip-

ple, and Secretary-Treasurer, Dr. J. Stewart Rodman. The Board is composed of three members each of the American Surgical Association, the Surgical Section of the American Medical Association and the American College of Surgeons. The Western Surgical Association, the Southern Surgical Association, the Pacific Coast Surgical Association, and the New England Surgical Association each have one representative, making a total of thirteen members.

According to the announcement, the Board recognizes two groups of candidates who may be eligible for certification. Group A, the Founders Group, is composed of those who have already amply demonstrated their fitness as trained specialists in surgery. Candidates from this group, on invitation by the Board, may make application and upon approval by the Board will be accepted as qualified without examination. Group B will make application to the Board and will qualify for certification by examination.

The forms for making application and other information may be obtained by writing to the Secretary, Dr. J. Stewart Rodman, 225 South Fifteenth street, Philadelphia, Pennsylvania.

One of the foremost concerns of organized medicine is the improvement in the methods of special training. Through the creation of special Boards of Certification, we now have a way by which training in the various departments may be specified and controlled with authority. There are now twelve such Boards covering the essential specialties.

The value of medical science to the public depends upon the quality of medical service. A highly qualified personnel in all the special fields will serve to raise the standard of the entire profession, safeguard the public, and increase our social influence.

Following action by the Federal Trade Commission Acts the Zerbst Pharmacal Company, St. Joseph, stipulated that it will not advertise that the Ulypto cough drops stop coughs and end colds quickly, or that Zerbst capsules stop colds before they get started, and keep colds from becoming dangerous.

LABORATORY

Edited by J. L. Lattimore, M.D.

A review of some of the interesting papers presented and discussed at the recent meeting of the American Society of Clinical Pathologists, held in Philadelphia on June 2, 3, 4, and 5, 1937 is given.

Dr. C. E. Ervin, Danville, Pennsylvania, reported the successful treatment of meningoencephalitis, complicating undulant fever, by the use of typhoid vaccine. Undulant fever is very prevalent in Kansas. The symptoms vary in intensity and the onset may be abrupt or insidious. The symptoms are usually quite characteristic by the time the physician is con-Weakness, sweating, temperature, sulted. general aches and chills are the most common manifestations. The diagnosis is confirmed by the isolation of the organism from the blood stream or from the exudate of the involved tissues, by culture, or by blood serum agglutination tests. Weak agglutinations in titrations up to 1:50 are found in many conditions and should not be confused with the high titres found in undulant fever. The term brucellosis is replacing the term undulant fever.

Dr. Timothy Leary, Boston, Massachusetts, advances the theory that scarred mitral valves are a definite indication of rheumatic endocarditis in childhood. It has been said that rheumatism tends to inflict damage on the heart valves rather than the joints in childhood, while in adult life the tendency is to damage the joints rather than the heart. In childhood, rheumatic infections produce death by its toxic effects. In the adult, disability and death are due to the combined effects of toxic and mechanical causes, or to mechanical causes alone.

Dr. Margaret Warwick, Buffalo, New York, reported a series of 500 autopsies on stillborn and newborn infants. Fifteen per cent of the deaths in this series were due to pneumonia. A few of these were true infections with the pneumococcus, while many were due to aspiration of amniotic fluid.

Dr. Roy Leadingham, Atlanta, Georgia, reported five cases of rat bite fever. The diagnosis is made by finding the spirochaeta in the blood, either by dark field illumination or by silver impregnation. The spirochaeta measure about four microns in length and are motile. The clinical picture is that of a very severe septicemia, usually developing about ten days

after the rat bite. Arsenic intravenously in small doses is a specific cure, the patient showing a complete recovery in a few days.

Dr. Emmerich von Haam, New Orleans, Louisiana, reported a large series of the various venereal granulomas. The granuloma venerum is a superficial infection involving the skin and fat. The lympho-granulo inguinale is a deeper seated process and involves the lymph glands. The microscopical pictures of the two conditions are entirely different. The differential diagnosis is made by the use of the Frei antigen, given intradermally. Lympho-granuloma inguinale gives a positive reaction to the Frei antigen in forty-eight hours while granuloma venerum does not react. In his experience, surgery is the best form of treatment. In those cases of granuloma inguinale complicated by rectal strictures, various types of therapy has been used but with slight or no improvement and death usually resulting in about five years.

Dr. S. E. Gould, Eloise, Michigan, reported a series of sugar tolerance tests, using the Exton, one day ,two dose test. He believes that the test is entirely dependable. In the writer's experience, with a moderate number of the Exton tests, the results have been difficult to interpret in too large a percentage of cases. However, the standard three hour test has proven itself to be entirely dependable.

Much criticism was directed to the practice of many hospitals in regard to leaving surgical specimens in the operating room for many hours after removal. The longer the period of time that expires between the removal of tissue and their fixation, the greater the shrinkage and autolysis of the cells. In many instances this cellular change makes exacting diagnosis very difficult. It is a well established fact that tissues, removed at operation, should be placed immediately in a preservative fluid. A ten per cent solution of formalin is the preservative most frequently employed. If the specimen measures more than two inches in diameter, it should be sliced so that the preservative will come in contact with all of the tissue.

The Howdy Company, St. Louis, pursuant to indictment by the Federal Trade Commission will discontinue representations that its mixer known as 7-Up settles the stomach, dispels the ill effects caused by excessive use of alcoholic drinks, banishes distress after eating, speeds digestion, and slenderizes.

Ancient Greek mathematicians had no symbol to represent zero.

TUBERCULOSIS ABSTRACTS

A review for physicians prepared monthly by the National Tuberculosis Association and published through the co-operation of the Kansas Tuberculosis and Health Association and The Kansas Medical Society.

PROGNOSTIC SIGNIFICANCE OF THE TUBERCULIN REACTION

Ninety-six cases of clinical tuberculosis were studied from 1925 to 1933. Reactions to the tuberculin test were minutely observed and the cases were classified as: (1) those where a strongly positive reaction was obtained: (2) those where a strongly positive reaction was not obtained. Observation of these cases six months later showed that fifty-five per cent of those who had not reacted strongly were prognostically bad, while only seventeen per cent of those who had reacted strongly were in a like condition. Of the former eighteen per cent had died, of the latter only four per cent.

In 1933 the survival rate for the whole group was fifty-three per cent, of the strongly positive group fifty-six per cent, of those not strongly positive forty-two per cent, or a spread of fourteen per cent in favor of the strongly positive group. Selecting only sputum positive cases from the whole group results were similar but with a lower differential, eight per cent.

Further evidence of the prognostic significance of the strongly positive reaction may be deducted from the fact that such pronounced reactions are usual in cases of extra-pulmonary surgical tuberculosis and that there is little tendency for these localized lesions to become generalized.

Again there may be cited the accepted vulnerability to tuberculosis found in the "virgin soil" of primitive races as illustrated by the severity of the disease among American Indians or in Professor Cummins' studies among the natives of South Africa. Dr. Cummins speaks of the "natural liability" to tuberculosis infection associated with "virgin soil" as a "dangerous defile at the very start of the road toward immunity."

It is a familiar experience to find a reduction in strength of the tuberculin test or its disappearance during the acute stage of a concurrent infectious disease. This fading away of the reaction may be evident in measles, typhoid, influenza, acute rheumatism, pneumonia, smallpox vaccination, chickenpox and whoop-

ing cough. Realizing the frequency with which some of these appear to stimulate tuberculosis activity it is reasonable to suppose that the disappearance of the skin reaction represents an embarrassment of the organism in its struggle against an existing tuberculous infection.

Professor Heimbeck's experience and similar observations of Spehl and Thys in Brussels in the study of tuberculous morbidity among nurses are introduced as further indication of a certain prognostic significance to be drawn from variations in intensity of skin reactions in adults.

THE AUTHOR'S HYPOTHESIS OF THE SIG-NIFICANCE AND MEANING OF THE TUBERCULO-CUTANEOUS REACTIONS

Before drawing final conclusions from these and other observations the question of the mechanism of the tuberculin reaction itself confronts us. The following experiment of Calmette is illuminating. When tuberculin is introduced into the conjunctival sac of a nontuberculous subject no reaction takes place. If blood serum from an actively tuberculous patient is introduced similarly in another nontuberculous subject there is still no reaction. If, however, tuberculin be mixed in vitro with blood serum from a tuberculous patient and the tube kept for a given time at a given temperature and then injected into the conjunctival sac of a known non-tuberculous subject, a prompt reaction takes place.

From this it may be concluded that: Tuberculin per se does not cause this reaction and serum from a tuberculosis patient does not cause it. There must, therefore, be a substance in the serum of the tuberculous patient which acts on the tuberculin to liberate something causing the toxic and irritant phenomena in the eye.

Living tubercle bacilli flourishing in a patient's body produces a substance resembling tuberculin. This comes in contact with the blood serum of the infected individual and the test tube experiment above described is repeated. The organism, as in other bacillary invasions, should now give a protective response. A substance appears in the serum which so acts on the tuberculin as to disintegrate it into (a) an irritant body producing toxic phenomena, and (b) some other unknown substance or substances. The author suggests the name "ergine" for this substance and assumes that the action of "ergine" on tuberculin is a stage in the elimination of tuberculin from the infected

organism. Since constitutional and focal reactions terminate favorably in a large number of tuberculous cases, it is also reasonable to assume that the toxic body (a) is combated by the elaboration of some anti-toxic factor which disposes of and eliminates the products of the action of the "ergine" on the tuberculin. Furthermore, it is again reasonable to assume that the more sensitive the organism is to tuberculin, i. e. the smaller the concentration of tuberculin required to give a response of "ergine," the more quickly will the tuberculin, collected or elaborated in that body, be disintergrated and disposed of.

Calmette found that if a guinea-pig, inoculated with living tubercle bacilli, was given gradually increasing doses of tuberculin (1) it became increasingly difficult to produce the reaction phenomena in the animals under treatment with tuberculin. However, such pigs always reacted to massive doses. (2) The serum of these treated animals contained nothing capable of neutralizing tuberculin in vitro, nor of passively immunizing other guinea-pigs against tuberculin. (3) The power of absorbing large doses of tuberculin without reaction was soon lost by the animals if the injections were suspended. (4) The lesions of these animals did not tend to progress more slowly than the lesions of the infected but untreated animals, but tended to progress more rapidly than in the controls.

CONCLUSION

There does not seem to be, at least in the guinea-pig, any relation between the power to absorb tuberculin without reaction and the power to successfully combat tuberculous infection, i. e., tuberculin per se is harmful even before the "ergine" has acted on it to produce toxic phenomena and further in the guinea-pig at least even more harmful than the "erginised" tuberculin.

The process of elimination of tuberculin consists of: (a) a response of "ergine" immediately followed by more or less reaction phenomena; (b) elimination at a varying rate of the results of the action of the "ergine." Organisms with quick and efficient "ergine" response dispose of their tuberculin piecemeal, obviating toxin saturation. Organisms with a slow or late "ergine" response permit the accumulation of tuberculin before "ergine" appears and functions with the resulting production of sudden large volumes of toxin.

One is now in a position to state the follow-

ing hypothesis: Since toxin saturation of tissues is undesirable, since accumulation of tuberculin in the tissues is undesirable, and since the evolution and action of an "ergine" is an essential factor in the prevention of both, then acute sensitiveness to the presence of tuberculin in the tissues leading to "ergine" formation and action before large amounts of tuberculin have accumulated tends to facilitate the elimination of the latter and prevent toxic saturation of the tissues, i. e., sensitiveness to tuberculin is of advantage to the infected organism.

The power to give a strongly positive Von Pirquet reaction is direct evidence of such sensitiveness.

Prognostic Significance of the Von Pirquet Cutaneous Reaction in Adults, Wm. W. Watson, M.D., Ch.B., Tubercle, March, 1937.

MEDICAL ECONOMICS

Edited by O. W. Davidson, M.D. of the Medical Economics Committee

CLINICAL COURSE OF

CONGENITAL (Inherited) DISSATISFACTION

ETIOLOGICAL FACTORS (Causes)

Inability to adjust to disappointments and thwarted hopes. Ideas of oppression; real or imaginary. Desire for ease. Ridiculous promises. Exaggerated abuses. Organized efforts of 'foreign' bodies. Capitalization on restlessness and dissatisfaction by native or naturalized parasites (that which lives upon or within living organisms) and saprophytes (gains life from dead or decaying organisms). Vasilating executives and legislators. Metastasis (spread) of corruption into positions of public trust. Low revenues obtainable on experience and qualifications.

RACIAL INFLUENCE

The people of the U.S.A. inherited this strain of restlessness and dissatisfaction from their ancestors. Hannah Peacock said, "Them that ain't got nuthin' to brag about exceptin' their ancestors, had ought to recollect that it ain't no trick to be nuthin' but a descendant".

The U.S.A. was colonized by groups of ambitious aggressive seekers of religious, economic, and political freedom. These people and their descendents, though boastful of their nativity, have never been lured from

the land in which they acquired these privileges.

MORPHOLOGY (Structure of Organization)

The absence of etiological (causes) factors and the abundant rewards during the first few generations produced a condition of grave concern abroad. The meteorlike rise of democracy troubled the ruling bodies of more than one country. Fear of their neighboring countries, combined with the uncertainty of their subject's loyalty, calcifies (hardened rock-like) the seat of many a monarch.

The problem of those in power was to dilute (weaken) the envy of their subjects and dispel from their minds the glory of democracy.

These rulers, in one way or another, found a fertile time during the chaotic period after the World War, to warp the virtues of freedom and democracy. While the people of the U.S.A. were yet under the toxic (poisonous) influence of prosperity, no opportunity was lost to magnify their minor or major infractions.

This wanton and autocratic abuse of the ideals of their subjects brought on introvert (selfish) and maniacal (violent) tendencies. Under the hypnotic influence of ruthless leaders they destroyed their own chances for freedom, both at home and abroad. Their rulers found opportunities to send emmisaries of agitation to our land. They cheered the multiplication of our mistakes. Our violations and corruptions have been additions to the security of foreign dictators. Every wavering son of democracy has been a dictator's tool of destruction.

PATHOGENISIS (Disease development)

There is a marked tendency for dissatisfaction to become pandemic (wide spread). Pride of independence becomes diluted by the dignification of dependence. The appetite for ease increases, want supercedes need, and nominal resistance gives way to greed. Desire for public assistance develops in to demands. Governmental support of these catabolic (destructive) desires result in delirious (unnatural) demands for both personal and public supplies and services.

There is a tendency to underestimate the virtues of maturity and experience. Groundless, but flagrant, criticism of justice whips up the circulation of destructive plans that sweep aside national traditions.

Manufactured virtues support the majority in their demands on a responsible minority which is not matched by any means of enforcing a proportionate responsibility on the majority. Lassitude (weakness) develops rapidly and the popularity of sitting down until ravenous appetites are satisfied becomes a costly fad. Efforts to overcome this tendency to sit frequently result in violent and bloody resistance. Instances are reported in which officials have used publically paid, forces to restrain productive procedure, in contrast to the previous accepted custom of rendering assistance to willing producers.

Personal responsibilities, thoughtfulness, and conscientious scruples are destroyed. Public spiritedness and appreciation do not respond to normal stimuli (incentive). The tolerance (endurance) to satisfaction is very unstable, and the consumption rapidly increases until only the most alluring and preposterous promises produce any auditory (hearing) response.

PROGNOSIS (Outlook)

Although this condition may assume alarming proportions, and producing costly and aggravating reactions, the outlook is not hopeless.

One must review past events, associate them with present findings, to gain any perspective of the future.

The acute (early) stage resistant to thoughtfulness and reasoning. Based upon an analysis of facts gained by lateral observation (from foreign countries) there is little to suggest recovery by crisis (suddenly). Points for direct observation are difficult to obtain, and no conclusive data is available on the degree of destruction or time required for recovery by lysis (gradual).

There is favorable factor in the dominant strain of aggressiveness in the American. Apparently unsurmountable obstacles can rapidly be overcome with the injection (consumption of proper information).

REMEDY

Therapy is frequently quite simple and most effective when the cause is found.

The following general treatment is outlined:

Proper appeal to reason with accurate facts.

Stimulation of proper responsi-

bility by adequate exercise of the "Golden Rule".

Exile all individuals infested with unamerican principles.

Deport all mechanized and corrupt servants of the public who are not immunized against deceitfulness and unfair principles.

Use adequate portions of American hormones (internal secretion) to fertilize the facilities of respect for law observance and the rights of fellowmen.

COMMENTS

The medical profession is directly affected during the progressive stages of this disease.

Let us assist in defrosting the imagination of the masses who follow the Pied Piper of our generation; thereby reducing the period of destructive changes and the possibility of permanent partial disability.

Your experiences and mode of treatment for this disease is solicited. Please send us such points as may prove useful.

AMERICAN MEDICAL ASSOCIATION MEETING

Although the vast amount of business handled each year by the American Medical Association House of Delegates makes it exceedingly difficult to present a readable and accurate summary of the meeting, the following represents an attempt to describe the highlights of the session held in Atlantic City, New Jersey, from June 7 to June 11.

The House of Delegates convened at 10 a.m. on June 7 and continued with executive and open sessions each day throughout the meeting.

Kansas was represented in the House of Delegates by Dr. J. F. Hassig, Kansas City, and Dr. H. L. Snyder, Winfield. Dr. J. F. Gsell, Wichita, and Clarence G. Munns, Topeka, were also present at all of the sessions.

Foremost interest of the meeting was undoubtedly centered around the portions which pertained to socialized medicine and it is probable that no meeting of the House of Delegates ever experienced a more dramatic series of events than occurred on this subject. Following a request to appear and an acceptance, United States Senator J. Hamilton Lewis, of Illinois, presented a talk before the House of Delegates which was received with a great amount of interest by the physicians assembled in Atlantic City and elsewhere, and which subsequently has given rise to much speculation. Senator Lewis' talk has widely been printed verbatim in lay and medical publications and the following is believed to be a summary of his remarks.

That he realizes the profession has disapproved of many of the recent social theories offered to medicine, but that he felt a point had been reached wherein social changes would become permanent and that all good citizens must accept and take

a part therein. That he knew definitely widespread and effective movements were under way wherein medicine in this country was intended to be completely regimented and that the only way for such to be avoided was through the actions of medicine itself. That he came to this meeting as a special ambassador of the President to express the desire of the President that medicine would find and offer a solution to the problem. That he felt the major problem to be considered pertained to indigent medical care and that he thought a workable system could be had wherein the individual physician establishes his qualifications to the federal government, accepts all indigent cases, and bills and receives payment, therefor, from the federal government. That he felt medicine could arrange to operate completely a system of this kind and that if it chose not to accept and make the most of this opportunity it must stand ready to bear the consequences of what would certainly

Senator Lewis's talk by unanimous action of the House of Delegates was referred to the Board of Trustees for consideration and appropriate action.

Of further great interest on this subject was the following resolution, introduced by the New York delegation and which had been approved by the House of Delegates of that organization:

WHEREAS, The house of delegates of the Medical Society of the State of New York in annual session at Rochester, 1937, adopted certain resolutions which carried instruction to its delegation to the House of Delegates of the American Medical Association; and

WHEREAS, These resolutions concern the following principles and proposals anent the development of a national health program and the special circumstances under which the delivery of a high quality medical care to the American people may be evolved under conditions within the framework of adopted policy of the American Medical Association; and

WHEREAS, These principles and proposals are as follows:

PRINCIPLES

- 1. That the health of the people is a direct concern of government, and a national public health policy directed toward all groups of the population should be formulated.
- (a) In the formulation of such policy the opinions and suggestions of organized medicine should be given preference.
- (b) That the House of Delegates of the American Medical Association create a group which shall formulate the principles and proposals of a national health policy to be submitted to the government.
- 2. That adequate medical care is an essential element of public health and local, state and federal governments need to supplement present efforts of the medical profession to provide it.
- (a) That the House of Delegates of the American Medical Association establish a working definition of the term "adequate medical care" suitable for the purpose of discussing national legislation and social legislation.
- 3. That the problem of economic need and the problem of providing adequate raedical care are not

identical and may require different approaches for their solution.

(a) Principle 3 implies that the problem of providing the individual with the means of securing medical care—that is, the economic needs—and the problem of distributing medical services are not identical; that these problems of economic needs should be approached separately from those of distributing medical services to the people.

PROPOSALS

- 1. That the first necessary step toward the realization of the above principles is to minimize the risk of illness by increasing preventive efforts through extension of public health services, federal state and local.
- (a) That the extension of federal, state and local preventive health measures is approved, provided it meets the needs of a given situation in the opinion of the medical profession in the locality affected and provided it integrates to the greatest possible extent the private practitioner of medicine in the development of preventive health services.
- 2. That the immediate problem is provision of adequate medical care for the medical indigent, the costs to be met from public funds.
- 3. That public funds should be made available for the support of medical education and for studies, investigations and procedures for maintaining the present high standards of medical practice. This support shall have the majority opinion of organized medicine to recommend it. If this is not provided for, the provisions of adequate medical care may prove impossible.
- 4. That public funds should be available for medical research as essential for high standards of practice in both preventive and curative medicine.
- 5. That public funds should be made available to hospitals that render service to the medically indigent and for laboratory diagnostic and consultative services.
- (a) With the provision that these consultative and laboratory diagnostic services shall be established only in regions where the medical profession approves the need for same and after consultation with the local medical profession in the area affected.
- 6. That in the allocation of public funds existing private institutions should be utilized to the largest possible extent and receive support as long as their service is in accord with the above proposals.
- (a) That insofar as the allocation of funds is concerned for these institutions, they should not be made on a pro rata population basis but should be limited strictly by the needs of given institutions in specified localities and the allocation should have the approval of the medical profession in the locality in which the institutions are located.
- (b) That in the selection of existing institutions to which public funds may be allocated their rating and their needs shall be measured by the standards of the Council on Medical Education and Hospitals of the American Medical Association; and that no public funds should be made available to existing institutions against and contrary to the majority opinion of the medical profession in the locality in which they exist.
 - 7. That the investigation and planning of the

measures proposed and their ultimate direction should be assigned to experts.

- (a) It being recommended that the various subdivisions of the American Medical Association, namely, its national, state and county components, furnish to the government on request lists of experts in their communities to carry out these principles and proposals.
- (b) That the word "expert" is taken to mean a man especially qualified by experience in his specific field. Nominations of these "experts" should be by units of organized medicine. The nominations and recommendations by organized medicine should be given preferential consideration by government in making its selection.
- 8. That the adequate administration and supervision of the health functions of the government, as implied in the above proposals necessitates, in our opinion, a functional consolidation of all federal health and medical activities under a separate department.
- 9. That we who subscribe to the above principles, proposals and recommendations hold the view that compulsory health insurance does not offer a satisfactory solution on the basis of these principles and proposals and repeat our objections to its enactment in this country; therefore be it

Resolved, That the House of Delegates of the American Medical Association endorse the principles, proposals and recommendations just cited; and be it further

Resolved, That the House of Delegates authorize the formation of a committee which shall, in conformity to the above, formulate a national health policy for submission to the government, and further be empowered to confer with government agencies and also with any other medical groups so that differences in conception, definition of terms and applicability of principles and procedures may be ironed out in conference regarding those matters in the above principles and proposals which are of national scope and to the end that they may be enacted.

Rumor was general that this resolution had originally been prepared in close cooperation with several important lay agencies and that the physicians in charge of its introduction had been requested to see that it was approved by the House of Delegates of the A. M. A. Of special interest was the fact that the resolution was released to the news papers before it was formally presented and that it was offered in open rather than in executive session. As is usual, the resolution was referred to a reference committee and thereafter numerous and lengthy hearings were held. Both Dr. Hassig and Dr. Snyder made several appearances before this committee to express their belief of the Kansas opinion thereon. Final result was a decision that the New York resolution should not be adopted and that the following action should be taken in its stead:

Your reference committee has carefully considered the Resolutions on the Development of a National Health Program, introduced by Dr. Samuel J. Kopetzky in behalf of the New York delegation, and has held hearings at which the details of the principles and proposals were freely discussed.

The Board of Trustees has already reported to

this House of Delegates its considered opinion pertaining to the reorganization, in one consolidated department, of the activities of the federal government having to do with the promotion of health and the prevention of disease. Copies of this statement, as printed in The Journal and in the Handbook of the House of Delegates, were transmitted to the President of the United States and to others in official position in Washington, and the attention of constituent state medical associations was especially called to the action of the Board, as follows:

'Recognizing that committees of the Senate and of the House of Representatives of the United States government and a special committee appointed by the President are at this time concerning themselves with the reorganization of government activities with a view to greater efficiency and economy, and recognizing also that the President, in his opening address to Congress, indicated that he would shortly present to the Congress recommendations for such reorganization of government activities in the executive branches, and recognizing moreover the great desirability that all activities of the federal government having to do with the promotion of health and the prevention of disease might with advantage be consolidated in one department and under one head, the Board of Trustees of the American Medical Association would recommend that such health activities as now exist be so consolidated in a single department which would not, however, be subservient to any charitable, conservatory or other government interest. It has been repeatedly said that public health work is the first problem of the state. It is the opinion of the Board of Trustees that health activities of the government, except those concerned with the military establishments, should not be subservient to any other department interests. This reorganization and consolidation of medical departments need not, under present circumstances, involve any expansion or extension of government health activities but should serve actually to consolidate and thus eliminate such duplications as exist. It is also the view of the Board of Trustees that the supervision and direction of such medical health department should be in the hands of a comparatively trained physician, experienced in executive administration.

Since the House of Delegates during this session has already approved this action of the Board of Trustees, your reference committee deems it unnecessary to submit for your consideration that portion of the resolutions which deals with this subject.

Your reference committee recognizes that certain principles stated in the resolution presented by Dr. Kopetzky have been considered by the House of Delegates on previous occasions and are matters of record. These include, for example, the recognition of the primary importance of public health, the opposition to compulsory sickness insurance and the separation of the problem on economic need and the distribution of medical service.

The Board of Trustees has given careful consideration to the extension of medical service to the indigent, as indicated in the following statement,

which was contained in the report of the Board of Trustees as printed in the Handbook and which was approved by this House during its session June 8, 1937:

'In the past, the medical profession has always been willing to give of its utmost for the care of those unable to pay. The available evidence indicates that today throughout the United States the indigent are being given a high quality of medical care and medical service. Nevertheless, the advances of medical science have created situations in which a group of the population neither wholly indigent nor competent financially find themselves under some circumstances unable to meet the costs of unsual medical procedures. The Board of Trustees of the American Medical Association points out the willingness of the medical profession to do its utmost today, as in the past, to provide adequate medical service for all those unable to pay either in whole or in part. Members of the medical profession, locally and in the various states, are ready and willing to consider with other agencies ways and means of meeting the problems of providing medical service and diagnostic laboratory facilities for all requiring such service and not able to meet the full cost thereof. These are problems for local and state consideration primarily rather than problems of federal responsibility. The willingness of the medical profession to adjust its services so as to provide adequate medical care for all the people does not constitute in any sense of the word an endorsement of health insurance, either voluntary or compulsory, as a means of meeting the situation."

The American Medical Association is cognizant of the medical needs of the people of the United States and is genuinely interested in all plans for providing and distributing medical care. The records, reports, source material and experience of the Association are of great value. They are at the service of agencies contemplating the development and operation of plans for medical care. These factual data, source material and experience are readily available for use in promoting and protecting the health of the American people.

Your reference committee recommends that the bureaus, councils and committees of the Association continue their studies of the need for and the methods of distributing medical care, to the end that the American Medical Association shall continue to do everything possible to promote and to protect the health of the American people.

The American Medical Association reaffirms its willingness on receipt of direct request to cooperate with any governmental or other qualified agency and to make available the information, observations and results of investigation together with any facilities of the Association.

With respect to proposals for a National Department of Health, your reference committee refers to the report of the Board of Trustees in the Handbook, page 107, which has just been read.

Your reference committee believes this fully covers the subject.

Foremost non-social subject was the adoption of the following resolution on contraception:

1. That the American Medical Association take such action as may be necessary to make clear to physicians their legal rights in relation to the use of countraceptives.

- 2. That the American Medical Association undertake the investigation of materials, devices and methods recommended or employed for the prevention of conception, with a view to determining physiologic, chemical and biologic properties and effects, and that the results of such investigations be published for the information of the medical profession.
- 3. That the Council on Medical Education and Hospitals of the American Medical Association be requested to promote throughout instruction in our medical schools with respect to the various factors pertaining to fertility and sterility, due attention being paid to their positive as well as to their negative aspects.

The committee appointed in 1935 to study the subject of birth control and related problems made its report in 1936 at the annual session of the American Medical Association. The committee was continued at the 1936 session for further study of the related problems. Its present report is on contraceptive practices. With slight modifications your reference committee approves the recommendations now made and recommends that there be added to the first recommendation, "That the American Medical Association take such action as may be necessary to make clear to physicians their legal rights in relation to the use of contraceptives,' the words "emphasizing the fact that all considerations in this report on the subject of the prevention of conception have their application only in conditions arising in the relation of physician and patient," and that this recommendation so modified be referred to the Bureau of Legal Medicine and Legislation.

Your reference committee recommends that the second recommendation, "That the American Medical Association undertake the investigation of materials, devices and methods recommended or employed for the prevention of conception with a view to determining their physiologic, chemical and biologic properties and effects, and that the result of such investigation be published for the information of the medical profession." be referred to the Council on Pharmacy and Chemistry and also to the Council on Physical Therapy.

Your reference committee recommends that the third recommendation, "That the Council on Medical Education and Hospitals of the American Medical Association be requested to promote thorough instruction in our medical schools with respect to the various factors pertaining to fertility and sterility, due attention being paid to their positive as well as to their negative aspects." be referred to the Council on Medical Education and Hospitals.

Your reference committee further recommends that information and advice concerning the prevention of conception given in dispensaries, clinics and similar establishments should be given only in such dispensaries, clinics and similar establishments legally licensed to treat the sick and under medical control.

In accordance with the usual procedure of the American Medical Association all letters, communi-

cations and resolutions of individuals and societies bearing on the subject of birth control and its related problems which have been sent to the American Medical Association were referred to and were fully considered by the committee on those subjects before and in the making of its report. This includes the resolution offered this day from the American Neurological Association.

Your reference committee recommends that the Committee to Study Contraceptive Practices and Related Problems be not discharged at the present time but that its existence be continued for the purpose of supplying any assistance which it may be called on to render.

Action thereon was taken more or less unanimously and the resolution is believed to cover most portions of a subject which has not previously been acted upon by organized medicine.

Numerous other resolutions were introduced and discussed. Among those adopted are the following: Resolution relating to the family physician and the school child; resolution on the importance of preventative medicine; resolution on motion picture on syphilis; resolution relating to water pollution control; resolution on time and place of annual session; resolution on campaign against syphilis; resolution on council on industrial health; resolution on reapportionment of delegates (wherein Kansas continues with two delegates); resolution adopting reports of officers, councils, standing committees, and special committees.

At the election of officers Dr. Irvin Abell, Louisville, Kentucky, was elected President-Elect; Dr. Junius B. Harris, of Sacramento, California, Vice-President; Dr. Olin West, of Chicago. Illinois, Secretary; Dr. Herman L. Kretschmer, Chicago, Illinois, Treasurer; Dr. N. B. Van Etten, New York City, New York, Speaker of the House of Delegates; and Dr. H. H. Shoulders, of Nashville, Tennessee, Vice Speaker of the House of Delegates.

In the special appointments announced at the close of the meeting Dr. J. F. Hassig, of Kansas City, was announced as a member for a three-year term on the Committee of Distinguished Service Awards, which group will serve to nominate physicians who should be recognized by the Association.

Decision was made that the 1938 session of the A. M. A. shall be held in San Francisco, California.

Final registration figures at the Atlantic City Session showed a total attendance of 9,764.

The following Kansas physicians attended:

Clarence E. Bates, Wichita.

John A. Billingsley, Kansas City.

Daniel V. Conwell, Halstead.

Louis B. Gloyne, Kansas City.

H. E. Haskins, Kingman.

J. F. Hassig, Kansas City.

W. E. Mowery, Salina.

Sam Murdock, Jr., Sabetha.

Sam Murdock, Jr., Sabetna.

Edwin N. Robertson, Concordia.

W. R. Scott, Baxter Springs.

H. L. Snyder, Winfield.

C. F. Taylor, Norton.

R. W. Urie, Parsons.

James Wheeler, Newton.

J. W. Young, Kansas City.

Clyde D. Blake, Hays.

E. S. Edgerton, Wichita.

J. F. Gsell, Wichita.

J. L. Lattimore, Topeka. Oscar S. Reeder, Fort Riley. Ross E. Weaver, Concordia. W. T. Wilkening, Fort Scott. F. E. Wrightman, Sabetha.

MEDICAL LITERATURE

Edited by Will C. Menninger, M.D.

LEFT VENTRICLE STRAIN

Two thousand consecutive post-mortem examinations were studied to determine the causes of hypertrophy of the right ventricle and the importance of pure left ventricle strain in producing this hypertrophy. Of the cases studied, 704 had hypertrophy of the right ventricle to the extent that the wall measured five mm. or more in thickness. In about one-fourth of these, no strain on either side of the heart was clearly evident. In sixty-one per cent of the remaining cases, the strain on the heart had been due to arterial hypertension, aortic valvular disease, or infarcts of the left ventricle, and no factor producing primary right ventricular strain could be found. Left ventricular strain was, then. the commonest cause of hypertrophy of the right ventricle.

Thompson, William Paul and White, P. D. The Commonest Cause of Hypertrophy of the Right Ventricle—Left Ventricular Strain and Failure. American Heart Journal 12641-649, January 1937.

CHOREA AND RHEUMATIC ACTIVITY

A study of the dependence of chorea on rheumatic activity reveals that one-half of the 251 cases of chorea under observation occurred in non-rheumatic subjects. Approximately one-fourth occurred in quiescent rheumatic subjects and approximately one-fourth occurred in active rheumatism. The authors conclude that chorea per se does not suffice for the recognition of the rheumatic subject nor for the diagnosis of rheumatic activity. They are of the opinion that the physiological background prerequisite to the development of chorea may be prepared by a number of abnormal conditions but is especially well prepared by the rheumatic state. This accounts for its frequency in rheumatic subjects, but the factor which initiates the attack of chorea can be entirely independent of rheumatic activity.

Coburn, A. F. and Moore, Lucile V. The Independence of Chorea and Rheumatic Activity. American Journal of Medical Sciences 193:1-4, January 1937.

HEREDITY IN DIABETES MELLITUS

Joslin and his co-workers find that the influence of heredity in the etiology of diabetes is obscured by other factors but that it is undoubtedly of prime importance. In his present series, which includes 1,617 parents and 2,835 siblings of 822 diabetics, and 427 parents and 862 siblings of 217 controls, 24.5 per cent of the patients gave a positive family history. Even higher percentages were found in special groups, as, in women as compared with men; in physicians as compared with patients; in Jewish patients as compared with non-Jewish, etc. The authors conclude that the predisposition to diabetes seems to be inherited as a Mendelian recessive character.

Joslin, E. P., Dublin, L. J. and Marks, H. H. Studies in Diabetes Mellitus. V. Heredity. American Journal of Medical Sciences 193:8-23, January 1937.

EFFECTS OF POSTURE ON BLOOD PRESSURE

Lutterloh noted the changes in blood pressure and pulse rate in three positions: horizontal, at an angle of 135 degrees, and vertical, taken at the same period each day between 2 and 4 p. m. This procedure was carried out on fifty normal adults, sixty normal children, fifty cases of secondary hypotension, sixteen cases of essential hypotension, and seven cases of primary hypotension. The response in the normal groups to postural change from the horizontal to the upright position was a slight fall in the systolic blood pressure, a definite rise in the diastolic pressure and a rise in the pulse rate. A similar response was noted in the secondary and essential hypotension groups. The primary hypotension group, however, responded abnormally by manifesting a decided fall in both the systolic and diastolic blood pressures with only a slight increase in the pulse rate. The similarity between primary hypotension and "postural hypotension", described by Bradbury and Eggleston, is suggested.

Lutterloh, Charles H. The Clinical Significance of the Effects of Posture on Blood Pressure. American Journal of Medical Sciences 193:87-96, January 1937.

UNTOWARD EFFECTS OF DIURESIS

The authors describe a clinical picture which may be seen in association with diuresis which consists of the following features: weakness, restlessness, mental confusion, apathy, coma, and in some instances, death. All of these features need not be present in a given case. The syndrome is attributed to the depletion of

water and sodium chloride and the treatment consists in the restoration of water and sodium chloride, preferably by mouth. Seven cases are reported. The authors stress that no indictment of the mercurial diuretics or of the various methods of dehydration is intended.

Poll, Daniel and Stern, J. Edward. Untoward Effects of Diuresis with Special Reference to Mercurial Diuretics. Archives of Internal Medicine. 58:1087-1094, December 1936.

CHRONIC ARTHRITIS

In this general summary of the causes and treatment of chronic arthritis. Irons stresses the necessity for treating the patient with arthritis individually with reference to his own special problem of general as well as local disease. He classifies chronic arthritis into two types, atrophic (rheumatoid) and hypertrophic (osteo-). Atrophic arthritis occurs in the younger age groups and is characterized by multiple joint involvement with fusiform appearance of joints of fingers, often ulnar deflection, and later ankylosis. The onset is either insidious or acute, and evidence of initial and often of continuing infection is frequent. Constitutional effects with slight fever, anemia, and poor nutrition are marked in many patients. Hypertrophic arthritis begins usually somewhat later in life, in persons often wellnourished, and causes disability from slight to severe crippling. It is usually polyarticular but may be monarticular. Lipping of joints and hyperostoses are frequent; ankylosis is rare; and fibrous thickenings and Heberden's nodes with later bony hyperplasia at the terminal joints of the fingers are common. The effects of the trauma of work are often noted in the hands and spine of the laborer, and evidences of infection are much less frequent than in the atrophic form and when discovered their removal influences the course of the arthritis little. Now and then joints in the same patient show in one the pathologic anatomy commonly found in atrophic arthritis and in another that of hypertrophic arthritis. Altho treatment depends on the unit study of the individual patient, general measures may be listed as follows: Rest for the patient as well as for the joints. This includes removal of the causes of worry and apprehension in so far as can be obtained. Elimination of infection is of first importance in many cases. A well-balanced diet including milk, eggs, meat, fruit, and vegetables is important, especially in the atroJULY, 1937 309

phic type. In obese patients, reduction of weight will give relative relief from trauma to weight bearing joints. Reduction of carbohydrates may at times decrease local swelling of joints. The general trend is away from drugs unless indicated by accompanying anemia or thyroid deficiency. Local treatment to improve nutrition and circulation in the joints is required. Heat, dry and with moist packs, combined with gentle massage, the degree to be determined in each case, increases local blood supply. Chronic arthritis requires skilled orthopedic care.

Irons, Ernest E. Chronic Arthritis, A General Disease Requiring Individualized Treatment. Annals of Internal Medicine 9:1658-1663, June 1936.

PERITONITIS

After a study of ninety-one fatalities occuring after gastrointestinal surgery, Shambaugh finds that, contrary to popular belief, peritonitis accounts for only about one-fourth of the fatalities and that operative fecal soiling, unless massive, rarely causes fatal peritonitis. Pneumonia is a more frequent fatal complication, accounting for over one-third of the fatalities. Of the cases of fatal peritonitis studied, only one-fourth could be attributed to operative soiling. The remainder were due to gross leakage resulting from a defective anastomosis or from perforation elsewhere, to gangrene resulting from impaired blood supply, or to a suppurative focus in the wound or retroperitoneum. He believes that accurate suturing with careful attention to blood supply is of greater importance in the prevention of fatal postoperative peritonitis than strict asepsis.

Shambaugh, P. Peritonitis as a Factor in the Mortality of Gastro-Intestinal Surgery, Annals of Surgery 104:382-387, September 1936.

POST-LUMBAR PUNCTURE HEADACHES

The insertion of a small piece of anhydrated sterile catgut in the puncture hole in order to seal the hole and prevent seepage of the spinal fluid is used by Heldt and Whitehead to prevent true post-lumbar puncture reactions. From their series of 220 cases, in half of which the catgut was used, they found that there is a reaction to the catgut procedure, but that it is less in duration and severity, less incapacitating and shows a different symptomatology but affects more patients. They believe the reaction is more correctly termed "catgut reaction" than

"post-lumbar puncture reaction". The use of this technique permits the patient to be safely up and about following puncture.

Heldt, T. J. and Whitehead, L. S. Clinical Studies in Post-Lumbar Puncture Headaches. Ame Psychiatry 93:639-648, November 1936. American Journal

THE TREATMENT OF GENERAL PARESIS

(Continued from page 295)

majority of these in less than six months." "This is an impressive picture of the advancement in the treatment of this disease since malaria therapy was introduced.'

CONCLUSIONS

- 1. In the prevention and treatment of paresis, the early diagnosis and continuous adequate treatment of all syphilis is most important.
- 2. Fever therapy, preferably malarial fever, supplemented by prolonged continuous administration of tryparsamide and a heavy metal constitutes the therapeutic regime of choice in the management of paresis.
- 3. The above plan is practical and can be used by the general practitioner, particularly in the early cases.

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NEWS NOTES

OSTEOPATHS VS NARCOTICS

Immediately following announcement by the Collector of Internal Revenue in Washington that Kansas osteopaths would lose their narcotic permits on June 30, the Kansas State Osteopathic Association filed suit in Federal District Court requesting that the federal government be enjoined from revoking permits to its members.

Preliminary hearing of the case was held before Judge Richard L. Hopkins in Topeka on June 29, and as is usual in injunction cases, a temporary order was granted until a final hearing involving testimony of witnesses and consideration of legal questions can be had.

New permits granted to Kansas osteopaths will, therefore, bear the stipulation that they are void in the event the present litigation is decided in favor of the ruling promulgated by the Internal Revenue Department.

It is interesting to note that the Internal Revenue Department and the United States District Attorney are strongly of the opinion that the osteopaths should not prevail in this action, and thus, it is probable the case either from the federal government or the osteopathic viewpoint will ultimately be appealed to the United States Circuit Court of Appeals. The Society received permission from Judge Hopkins at the preliminary hearing to file an amicae curiae brief and will, therefore, be represented in all future hearings.

Judge Hopkins has not as yet designated a date for final hearing.

POSTGRADUATE COURSE

The third of a series of postgraduate courses, financed with funds available under the Social Security Act and sponsored by the Kansas State Board of Health in conjunction with the Society Committee on Maternal and Child Welfare, is to be held in the north-east area of the state from August 9 to September 3.

Plans of the event provide for Dr. Frank E. Neff and Dr. L. A. Calkins, professor of pediatrics and obstetrics respectively at the University of Kansas School of Medicine, to present correlated discussion on pediatrics and obstetrics at each of five towns once a week for four consecutive weeks. The dates and places of the meetings are as follows:

Topeka, August 9, 16, 23, 30.

Manhattan, August 10, 17, 24, 31.

Marysville, August 11, 18, 25, September 1.

Hiawatha, August 12, 19, 26, September 2.

Atchison, August 13, 20, 27, September 3.

Hours of the meetings are from 4:00 to 7:00 p. m. and from 8:00 to 10:00 p. m. All doctors of medicine are entitled to register for the course and no admission charge is made. Interest will be evidenced in the fact that most all of the meetings are to be held in airconditioned places.

Much encouragement was received from the two similar courses previously held in north-west and north-central Kansas and it is believed that every physician accessible to the above location will feel amply repaid for time given in attending this event. The scientifiic material presented consists of a brief but complete sym-

posium on all matters pertaining to maternal and child welfare.

SALES TAX

Several inquiries have been received as to whether the term "twenty dollars in the aggregate for any one month" as used in the Compensating Tax Act governing out-of-state purchases under the Sales Tax means twenty dollars in any one invoice, or twenty dollars from one concern, or twenty dollars in total purchases.

Some doubt exists as to the correct legal determination of these possibilities but from all information which can be secured it seems probable that the Kansas Tax Commission will hold that "twenty dollars in the aggregate" means twenty dollars in total purchases from any number of suppliers in any one month.

Thus a suggestion is made that every physician make certain tax is paid on all out-of-state purchases unless the amount is comparatively minor. This suggestion is emphasized by reason information has been received that certain out-of-state concerns are attempting to lead physicians to believe that tax can be legally evaded through several suggested methods, and as it is believed all of these methods will ultimately lead the purchaser into difficulty.

COMMITTEE CHAIRMEN MEETING

Dr. J. F. Gsell, President, plans to hold a meeting of all committee chairmen within the near future for discussion and completion of programs each committee will accomplish during the ensuing year.

It is Dr. Gsell's desire that each committee shall meet frequently and that each shall accomplish a definite planned program.

NEW MANUAL

A health manual for teachers outlining suggested health procedure for Kansas public schools has recently been issued by the Kansas State Board of Health. Copies may be obtained from that office in Topeka.

CRIPPLED CHILDREN'S MEETING

The annual meeting of the Kansas Crippled Children's Society was held at Wichita on June 21.

Governor Walter A. Huxman was the principal speaker of the meeting. Officers present were: Mr. C. Q. Chandler, Wichita; Mr. R. A. Raymond, Wichita; Dr. W. M. Balch, Baldwin; Father Edmund Pusch, Atchison; and Mr. Elwood M. Brooks, Oberlin.

Mr. Raymond, secretary of the organization, stated in his annual report that the Kansas Crippled Children's Commission had cared for 4,707 children during the five and a half years it has been in operation, 1,344 of which are chronic cases; that 108 diagnostic clinics have been held during the same period and through which 4,435 examinations were made; and that the Commission now has a registration of 4,774 children on its records.

Discussion was also had concerning the possibility of utilizing Social Security Act funds for financing, instead JULY, 1937

of the present one-tenth mill county levies.

The Society was represented at the meeting by Dr. W. P. Callahan, Dr. Charles R. Rombold, and Mr. John F. Austin, all of Wichita.

HOSPITAL SALES TAX

The Kansas Tax Commission recently handed down the following ruling relating to sales tax collection by hospitals:

"Hospitals, infirmaries, sanitariums and similar institutions are engaged primarily in the rendition of services. No tax attaches to their gross receipts from meals, bandages, dressings, drugs, x-ray photographs, or other tangible personal property used in the rendering of hospital service, even though the charges for such items are segregated from the charges for other hospital services. Hospitals, infirmaries and sanitariums are deemed to be the purchasers for use or consumption of the above tangible personal property and the sale of such items to them is taxable.

"Where hospitals operate dining rooms or pharmaceutical dispensaries, or otherwise sell tangible personal property or taxable services to consumers or users, apart from the rendition of hospital service, and make specific charges therefor, the receipts from these sources are taxable."

This is believed to establish hospitals in the same category as physicians and to permit them to pay sales tax to their consumers instead of making collection from patients, keeping records, and remitting directly to the Commission.

Likewise, the problems of out-of-state purchases and the sale of property separate and apart from the rendering of service is the same as that experienced by physicians.

MEDICAL ECONOMICS

A special meeting of the Medical Economics Committee is to be held at the Hotel Sunflower in Abilene on Sunday, July 18.

Several important matters concerning socialization of medicine practice will be discussed and it is probable that several recommendations in this connection will be approved.

COMMITTEE

Dr. J. F. Gsell, President, recently announced the appointment of a committee to assist in investigating and approving organizations which desire to ally themselves with the practice of medicine. Several applications of this kind have already been received from lay x-ray, clinical laboratory, and anesthtetic technicians.

The members of this committee who will serve during the next year are as follows: George E. Milbank, M.D., Wichita, Chairman; Henry E. Haskins, M.D., Kingman; K. Armand Fischer, M.D., Arkansas City; Charles Rombold, M.D., Wichita; George E. Paine, M.D., Hutchinson; and A. C. Eitzen, M.D., Hillsboro.

SOCIAL SECURITY PAYMENTS

Operators of private laboratories, private sanitariums, and physicians employing one or more were advised today

by Commissioner of Internal Revenue Guy T. Helvering to make immediate tax returns as required under the provisions of Titles VIII and IX of the Social Security Act to avoid further payment of drastic penalties which are now accruing.

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Commissioner Helvering pointed out that every person employed in such work came under the provisions of Title VIII, which imposes an income tax on the wages of every taxable individual and an excise tax on the pay roll of every employer of one or more. This tax is payable monthly at the office of the Collector of Internal Revenue on the first of this year. This tax is employee alike is one per cent of the taxable wages paid and received.

Under Title IX of the Act, employers of eight or more persons must pay an excise tax on their annual pay roll. This tax went into effect on January 1, 1936, and tax payments were due from the employers, and the employers alone, at the office of the Collector of Internal Revenue on the first of this year. This tax is payable annually, although the employer may elect to pay it in regular quarterly installments.

The employer is held responsible for the collection of his employee's tax under Title VIII, the Commissioner explained, and is required to collect it when the wages are paid the employee, whether it be weekly or semimonthly. Once the employer makes the one per cent deduction from the employee's pay, he becomes the custodian of Federal funds and must account for them to the Bureau of Internal Revenue.

This is done, Mr. Helvering said, when the employer makes out Treasury form SS-1, which, accompanied by the employee-employer tax, is filed during the month directly following the month in which the taxes were collected. All tax payments must be made at the office of the Collector of Internal Revenue in the district in which the employer's place of business is located.

Penalties for delinquencies are levied against the employer, not the employee, the Commissioner pointed out, and range from five per cent to twenty-five per cent of the tax due, depending on the period of delinquency. Criminal action may be taken against those who willfully refuse to pay their taxes.

The employers of one or more are also required to file Treasury forms SS-2 and SS-2a. Both are informational forms and must be filed at Collectors' offices not later than next July 31, covering the first six months of the year. After that they are to be filed at regular quarterly intervals. Form SS-2 will show all the taxable wages paid to all employees and SS-2a the taxable wages paid each employee.

Participation in a state unemployment compensation fund, approved by the Social Security Board, does not exempt employers from the excise tax under Title IX, Commissioner Helvering said. Nor does the fact that there is no state unemployment compensation fund relieve the employer of his Federal tax payments. In those states where an unemployment compensation fund has been approved, deductions up to ninety per cent of the Federal tax are allowed the employer who has already paid his state tax. These deductions are not allowed unless the state tax has been paid.

This tax is due in full from all employers in states having no approved fund. The rate for 1936 was one per cent of the total annual pay roll containing eight or more employees, and for 1937 it is two per cent. The rate increases to three per cent in 1938 when it reaches

its maximum. The annual returns are made on Treasury form 940.

An employer who employs eight or more persons on each of twenty calendar days during a calendar year, each day being in a different calendar week, is liable to the tax. The same persons do not have to be employed during that period, nor do the hours of employment have to be the same.

AMERICAN BOARD OF SURGERY

In answer to the widespread demand for an agency which will attempt to certify competent surgeons the American Board of Surgery has recently been organized. This Board is a member of the Advisory Board of Medical Specialties which include all of the boards of certification for the different medical specialties which have been already organized. Since boards were in existence for the certification of practitioners of some of the surgical specialties such as ophthalmology, otolaryngology, obstetrics and gynecology, genito-urinary surgery and orthopedic surgery it is expected that the American Board of Surgery will be responsible for the certification of general surgeons as well as those practicing in the remaining specialized subdivisions of surgery.

Acting upon the initiation of the American Surgical Association the following surgical societies cooperated in the creation of the American Board of Surgery: the American Surgical Association, the Surgical Section of the American Medical Association, the American College of Surgeons, the Southern Surgical Association, the Western Surgical Association, the Pacific Coast Surgical Association and the New England Surgical Society. The first three of these bodies which are national in scope have three representatives on the Board. All of the other societies have one representative each. The representatives of the cooperating societies are nominated by the society which they represent and upon approval of the Board shall become members of it. The term of membership on the Board will be six years. The following were chosen to represent the cooperating surgical societies:

Dr. Evarts A. Graham

Dr. Arthur W. Elting

Dr. Allen O. Whipple

Dr. Donald Guthrie Dr. Edwin R. Schmidt Dr. Harvey B. Stone

Dr. Fred W. Rankin

Dr. Howard M. Clute Dr. J. Stewart Rodman

Dr. Philemon E. Truesdale land Surgical Society.

Dr. Thomas Orr

Dr. Robert Payne

Dr. Thomas Joyce

Representing the Western Surgical Association.

> Representing the Southern Surgical Association.

> Representing the American

Representing the American

Representing the Surgical

Representing the New Eng-

Section of the A. M. A.

Surgical Association.

College of Surgeons.

Representing the Pacific Coast Surgical Association.

The following officers were elected; Chairman-Dr. Everts A. Graham. Vice-Chairman—Dr. Allen O. Whipple. Secretary-Treasurer-Dr. J. Stewart Rodman.

Two groups of candidates are recognized for qualification by the Board.

(A) Those who have already amply demonstrated their fitness as trained specialists in surgery.

(B) Those who, having met the general and special requirements exacted by the Board, successfully pass its qualifying examination.

The first of these groups, the Founders Group, upon invitation by the Board will be chosen from the following:

(1) Professors and Associate Professors of Surgery in approved medical schools in the United States and Canada.

(2) Those who for fifteen years prior to the Board's organization have limited their practice to surgery.

(3) Members of the American Surgical Association, the Southern Surgical Association, the Western Surgical Association, the Pacific Coast Surgical Association and the New England Surgical Society, who are in good standing January 9, 1937.

All applications for the Founders Group must be received within two years of the Board's organization, January 9, 1937. No candidates for the Founders Group will be considered after that date.

Requirements for those to be qualified by examination will be as follows:

(1) Graduation from a medical school of the United States or Canada recognized by the Council on Medical Education and Hospitals of the A. M. A. or graduation from an approved foreign school.

(2) Completion of an internship of not less than one year in a hospital approved by the same Council, or its

equivalent in the opinion of the Board.

(3) Special Training. A further period of graduate work of not less than three years devoted to surgery taken in a recognized graduate school of medicine or in a hospital or under the sponsorship accredited by the American Board of Surgery for the training of surgeons. This period of special training shall be of such character that the relation of the basic sciences of anatomy, physiology, pathology, bacteriology and biochemistry is emphasized. Knowledge of these sciences as applied to clinical surgery will be required in the examination. Adequate operative experience in which the candidate has assumed the whole responsibility will be required. An additional period of not less than two years of study or practice in surgery.

(4) The candidate must present to the Board sufficient evidence of good moral character as to justify it in the belief that he will not engage in fee splitting and other

dishonest practices.

It is expected that the Board, with the assistance and cooperation of the American Medical Association and the American College of Surgeons, will be able to increase the facilities which now exist for the adequate training of young surgeons by means of residencies, fellowships. etc., in suitable hospitals.

The above requirements, especially those referring to surgical training, are subject to change from time to time as the existing opportunities for training in this field

of specialization may be broadened.

The qualifying examination will be divided into two parts; Part I, written, and Part II, clinical, bedside and practical. The written part, Part I, will concern itself with general surgical problems and with the clinical application of the basic sciences of surgery to those problems. This examination will cover a period of three hours each and will be held simultaneously in as many

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centers as are necessary to accommodate the number of applicants who are eligible. Part II, is entirely oral and will also concern itself, in the main, with general surgery and, as stated for Part I, clinical application of the basic sciences to the clinical problem represented. In addition to this, in Part II, an examination will be given to test the candidate's knowledge of operative surgery, x-ray plate interpretation and the principles and application of surgical anesthesia. This examination will be held in as many centers as the Board may determine necessary to accommodate the eligible candidates. Reexaminations will be allowed providing one year shall elapse between examinations.

The fee for Group A, the Founders Group, shall be \$25. The fee for Group B shall be \$75, payable as follows: \$5 for registration fee, which shall be returned if the candidate is not accepted for examination; \$20 for Part I; and \$50 for Part II. The same fee will be required for each reexamination. Once the candidate has become qualified, be will have no further financial obligation to the Board.

This Board is a non-profit organization. All fees will be used, after a reasonable amount is set aside for necessary expenses in maintaining its office, conducting examinations, etc., to aid in improving existing opportunities for the training of the surgeon.

A certificate attesting to a candidate's qualifications in surgery after meeting the requirements of the Board will be issued, having been signed by its officers.

Any certificate issued by the Board shall be subject to revocation by the Board at any time in case it shall determine in its sole judgment, that a candidate, who has received a certificate, either was not properly qualified to receive it or has become disqualified since its receipt.

The Board will hold its first examination (Part I, written) on September 20, 1937. All inquiries concerning applications for this examination should be received by the secretary's office promptly.

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Requests for booklets of information, application blank, and other information should be addressed to the Secretary—Dr. J. Stewart Rodman, 225 South 15th Street, Philadelphia, Pennsylvania.

COUNTY SOCIETIES

Members of the Brown County Medical Society had a dinner-meeting June 4 at the Moreland Hotel. Guest speaker for the evening was Dr. Ralph Burns of St. Joseph, Missouri.

A lecture by Dr. Howard Snyder, of Winfield, on the treatment for fractures of the lower extremities featured the regular monthly meeting of the Butler-Greenwood County Medical Society held on June 11 at the Allen Memorial Hospital. Dr. Snyder illustrated his lecture with slides and motion pictures. Approximately twenty-five physicians attended the meeting.

Approximately fifty physicians attended a quarterly meeting of the Central Kansas Medical Society May 27 at St. Anthony's Hospital, in Hays. Speakers were Dr. K. D. A. Allen, Denver, Colorado, whose subject was "Differentiation of Childhood Tuberculosis Infection and Adult Type of Tuberculosis," and Dr. J. R. Jaeger, also of Denver, who spoke on "Sciatic Neuralgia, Its Cause and Treatment."

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Dr. Sam H. Snider and Dr. Hugh L. Dwyer, both of Kansas City, Missouri, spoke on May 27 at a meeting of the Crawford County Medical Society at the Hotel Stilwell in Pittsburg. Dr. Snider discussed "Treatment of Tuberculosis in the Home," and Dr. Dwyer's topic was "Treatment of the New Born Baby."

Twenty-one members were present at the Franklin County Medical Society dinner-meeting in Ottawa, May 26. Dr. Claude Hunt of Kansas City, Missouri, was the speaker, who chose as his subject "Diseases of the Stomach." He illustrated his lecture with lantern slides and a movie on the same subject was shown. Dr. Lynne Greene of Kansas City, Missouri, was also a guest.

Members of the Labette County Medical Society were guests of the Katy Hospital staff at a dinner-meeting May 26 in Parsons. Two Kansas City, Missouri, physicians, Dr. Graham Asher and Dr. Orville Richardson spoke on, "Diagnosis in Heart Disease" and "Unusual Events in Chest Surgery," respectively.

Members of the Marion County Medical Society held a joint meeting with the societies of McPherson and Harvey counties at Newton June 7. Guest speakers were Dr. J. P. Engle, professor of surgery, and Dr. F. C. Neff, professor of pediatrics of the University of Kansas School of Medicine.

The Washington County Medical Society met in Washington on June 8 for dinner and a business meeting. Dr. D. A. Bitzer, secretary of the society, discussed the state meeting which he attended.

Members of the Rice County Medical Society sponsored a free examination and clinic for children of preschool age during the latter part of June. The clinic, under the direction of Dr. Robert H. Riedel, Kansas State Board of Health, was held in the following towns: Lyons, Sterling, Alden, Chase, Bushton, and Little River. Local physicians and dentists assisted Dr. Riedel in the examinations.

The Southeast Kansas Medical Society held its regular meeting at the Brown Hotel, Neodesha, on June 17. Featured on the scientific program was Dr. Lyle Powell, of Lawrence, who talked on the subject "A Medical Man in India and China." Dr. Powell showed several reels of pictures in connection with his lecture.

The 190th regular quarterly meeting of the Golden Belt Medical Society was held in Manhattan on July 1. Dinner was preceded by a smoker and the following program was presented: Dr. Howard T. Hill, Kansas State College, Manhattan, "Non-Curative Doctors"; Dr. George Knappenberger, Kansas City, Missouri, "Gastrointestinal Diseases", Dr. J. D. Colt, Manhattan, "Coronary Occlusion" and Dr. Victor E. Chesky, Halstead, "The Heart in Relation to Thyroid Disease".

Members of the Franklin and Miami County Medical Societies were guests at the Osawatomie State Hospital meeting June 30. The program which followed dinner, included talks on: "Relationship Between General Medicine and Psychiatry", Dr. Ralph M. Fellows, Superintendent of Osawatomie State Hospital; "Psychosis Due to Carbon Monoxide Poisoning", Dr. Marshall E. Hyde, Osawatomie State Hospital; "Encephalitis", Dr. Lyle S. Powell, Lawrence, consultant in otolaryngology and

ophthalmology; and "Pagets Disease", Dr. Frank Koenig, Osawatomie State Hospital.

MEMBERS

The board of county commissioners of Wyandotte County has appointed Dr. W. D. Bishop, of Kansas City, as county physician to fill the vacancy caused by the resignation of Dr. J. A. Burger.

Dr. O. W. Davidson, of Kansas City, attended the American Urological Association meeting in Minneapolis. Minnesota, on June 29, 30 and July 1. Dr. Davidson spent a day with a group of the urologists at the Mayo Clinic, where a special program had been arranged.

Dr. A. C. Flack, of Fredonia, attended a banquet of the medical department of the University of Cincinnati recently. Dr. Flack is one of the three living members who were graduated from the medical department of the college in 1885.

Dr. E. O. King, of Herington, will spend the summer in Cleveland to continue his studies in electro-cardiography.

Dr. Raymond J. Leiker, of Ellinwood, will move this summer to a new location in Great Bend.

Dr. John L. Lattimore and Dr. L. R. Pyle, both of Topeka, were speakers at a staff meeting held recently at the St. Joseph Hospital in Concordia.

Dr. Nelse F. Ockerblad and Dr. Hjalmar E. Carlson, Department of Urology, University of Kansas School of Medicine, were awarded a Certificate of Merit. class I, for their exhibit illustrating the distribution of urethral pain, which was presented at the Atlantic City Session of the American Medical Association.

Dr. James H. O'Neil; recently has moved from Topeka to Kansas City.

Dr. V. L. Pauley, of Wichita, spoke recently before the Sumner County Medical Society at Wellington, on "Management of Urinary Calculi."

Dr. E. M. Seydell spoke before the American Laryngological Association at Atlantic City, May 31. on "Spontaneous Perforation of Chest Wall by Aspirated Bodies." Dr. Seydell discussed the paper by Dr. Ralph Fenton of Portland. Oregon, on "Septicemia Following Mastoid Infection." presented before the American Triological Society at Atlantic City.

Dr. E. Trekell, of Wellington, has been appointed temporarily as county physician to take the place of Dr. H. A. Vincent, who died June 9.

Dr. O. R. Brittain, Salina, has been elected a member of the International Congress of Radiology. The congress will meet in Chicago in September.

Dr. C. E. Hardin of Oswego, is the newly appointed health officer of Labette County, replacing Dr. O. E. Stevenson, who was recently appointed as assistant superintendent of the State Hospital for Epileptics at Parsons. Other newly appointed county health officers include: Dr. L. S. Ott, Wichita County; Dr. Otis H. True, Cheyenne County; Dr. Geo. R. Lee, Woodson County, and Dr. E. M. Ireland, Pratt County.



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Dr. Alfred H. Rogers. Hepler, was recently designated an honorary member by Crawford County Medical Society.

MORBIDITY REPORT

New communicable disease cases in the state as compared with last month are reported by the Kansas State Board of Health as follows:

	Month ending June 26	Month ending May 29
Whooping Cough	399	307
Scarlet Fever	257	1082
Mumps	237	981
Syphilis		181
Pneumonia	112	223
Chickenpox	90	361
Measles	81	175
Tuberculosis	73	84
Gonorrhea	57	84
Diphtheria	27	32
Smallpox	26	64
Influenza	12	35
Erysipelas	10	14
Typhoid Feveer		7
Cancer	_	6
Meningitis	4	7
Encephalitis	2	3
Poliomyelitis	2	0
German Measles		14
Vincent's Angina	1	6
Undulant Fever		6
Septic Sore Throat	1	3

DEATH NOTICES

Dr. Walter E. Bartlett, 67 years of age, died at his home in Belle Plaine on June 7. He was born in Louisiana, Missouri, and had practiced medicine in Belle Plaine since 1894. He was for years a prominent member. of the high school board and a member of the Sumner County Medical Society.

Dr. James Howard Douglass, 55 years of age, of Arkansas City, died at his home on June 10 after an illness of six years. Dr. Douglass had practiced medicine in Arkansas City for thirteen years prior to his illness. He was a native of Bellevue, Pennsylvania, and went to Arkansas City in 1918. He was for several years a member of the Mercy Hospital staff, and for some time was associated with the late Dr. W. T. McKay and Dr. E. F. Day. He was a member of the Cowley County Medical Society.

Dr. Hazley Thomas Groody, 53 years of age, of Manhattan, died at St. Luke's Hospital in Kansas City, Missouri, on June 2. Dr. Groody was born in Washington, Kansas, in 1883. He received his Bachelor of Science degree from Valparaiso University in 1909 and the degree of Doctor of Medicine from the Chicago College of Medicine and Surgery in 1913. He practiced for a time in Barnes and in Washington, before going to Manhattan in 1919. Dr. Groody had been assistant student health physician of the Kansas State Agricultural College since 1925 and had served as president and secretary of the Riley County Medical Society.

Dr. Henry Ansel Vincent, 61 years of age, died suddenly at his office in Wellington on June 9. Death was attributed to a heart attack. Dr. Vincent was the county physician. He moved to Wellington from Perth. Kansas, in 1919. During the World War he was a first lieutenant in the medical corps. He was a member of the Sumner County Medical Society.

ANNOUNCEMENTS

The Rocky Mountain Medical Conference will be held in Denver, Colorado, from July 19 to July 21. Any further information desired may be obtained from Mr. Harvey T. Sethman, Executive Secretary, 1612 Tremont Place. Denver, Colorado.

The American Public Health Association will hold its Sixty-sixth Annual Meeting in New York City, October 5 to 8 inclusive, 1937. The National Organization for Public Health Nursing will meet with the Association at the same time.

For further information write Dr. Reginald M. Atwater, Executive Secretary of the Association at 50 West 50th Street, New York, N. Y.

Announcement has been made of the sixteenth annual clinical and scientific session of the American Congress of Physical Therapy, September 20, 21, 22, 23 and 24, at the Netherland Plaza Hotel, Cincinnati. The program includes many special features such as technical and scientific exhibits, a full day of hospital clinics where technique will be adequately demonstrated, and a large number of instructive lectures by prominent workers in specialized fields of medicine.

Physicians, their technical assistants, and nurses working in institutional departments of physical therapy are urged to attend this important session. There will be no registration fee.

The International Hospital Association will hold the Fifth International Congress of Hospitals in Paris, France, from July 6 to 11 inclusive, 1937. The meetings will occur during the International Exposition which will group the exhibits and products of more than fifty countries under the general caption, Art and Technology.

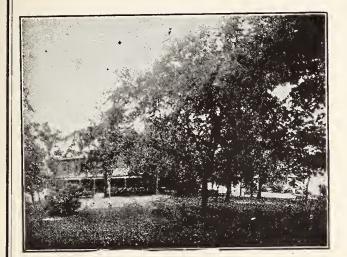
Dr. Malcolm T. MacEachern of the American College of Surgeons is vice-president of the Association. The Federation of the Hospital Union of France has been designated officially by the Ministry of Public Health to cooperate with the Association, and the program and arrangements for the Congress are now being completed.

The American Board of Ophthalmology conducted an examination in Philadelphia, on June 7, 1937, and a similar examination will be given in Chicago on October 9, 1937.

All applications and case reports, in duplicate, must be filed at least sixty days before the date of examination. Further information may be had from John Green, M.D., Secretary, 3720 Washington Boulevard, St. Louis. Missouri.

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An outstanding scientific event has been set for Chicago this September, when the Fifth International Congress of Radiology convenes. The dates are September 13 to 17, inclusive, and the meeting place is the Palmer House. For general information write Dr. Benjamin H. Orndoff, 2561 North Clark Street, Chicago, Illinois.

BOOK REVIEW

The DISEASE OF INFANTS AND CHILDREN—by J. P. Crozer Griffith, Emeritus Professor of Pediatrics in the University of Pennsylvania and A. Graeme Mitchell, Professor of Pediatrics, College of Medicine, University of Cincinnati. Second Edition, 1937. Pubished by W. B. Saunders Company, Philadelphia, Pennsylvania, 1154 pages at \$9.00 per copy.

A second edition of this excellent and highly-used general text book will be welcomed by students and practitioners alike. Its eleven hundred fifty-four (1154) pages devoted to the diseases of infancy and childhood, with a section on general development and care are well written and contain many illustrations. The subject material is thoroughly down to date and includes not only the stock-in-trade of all pediatric textbooks, but also results of the authors' wide personal experience. At the end of each chapter may be found an extensive and useful bibliography including both foreign and American sources. From this standpoint alone, the work will be found to be a most valuable reference book. It is a well composed, well illustrated, complete text book, which is to be recommended to all interested in the field of pediatrics.-Lucius E. Eckles, M.D.

YEAR BOOK OF NEUROLOGY, PSYCHIATRY AND ENDOCRINOLOGY. Reese-Pasking-Severing-haus. Year Book Publishers, Chicago, Illinois, 1936.

The authors that have been chosen to edit the three portions of this publication have done their work well. They have selected most worthwhile papers in their respective fields, condensed the main points to a small space but retaining the substance of the articles. The editors' comments are kindly critical, bestowing credit only where credit is due, and taking issue when they feel that there is room for argument.

This book is a worthwhile reference book and certainly gives one an excellent opportunity to review that which is new in the fields of neurology, psychiatry and endocrinology.—L.R.P.

ENDOCRINOLOGY. Clinical application and treatment. By August A. Werner. Publisher, Lea and Febiger, Philadelphia, Pennsylvania, 1937.

This book is an excellent treatise on the many endocrine disorders and their varied and complex symptoms and physical findings. The author has painstakingly picked many case histories to bring out the salient points of the particular disorder that is under discussion and has illustrated those points with many photographs.

A reasonable portion of the book deals with the origin, histology and normal physiology of the endocrine glands. This is followed by discussion of the etiology, pathology and pathological physiology of the varying glandular disturbances. The relationship of one gland to another, and to the rest of the body and body

functions is also taken up in sufficient detail. Last but not least, the present day treatment of the varying glandular disorders is taken into consideration.

The conservatism displayed throughout the entire work is worthy of mention. The book is nicely bound and published. It is a book that is valuable, not only as a text but as a reference book on endocrine disturbances.—L.R.P.

An interesting new publication received recently in the central office is entitled "Digest of Treatment". To be issued monthly, it will do for the vast field of medical magazines what "Reader's Digest" does for lay periodicals. To quote the publishers, J. B. Lippincott Company: "Each month, Medical Editors, every one a clinical practitioner, carefully select, from over two hundred journals, material to be condensed. In their selections they choose both the favorable and unfavorable reports, realizing that the physician is keenly interested in the unbiased evaluation of the therapy he contemplates trying. The digests and condensations, selected and made by men of clinical experience, fill a need expressed by physicians many times".

NEW BOOKS RECEIVED

TREATMENT OF DIABETES MELLITUS—By Elliot P. Joslin, M.D., Medical Director, George F. Baker Clinic, Boston, Massachusetts. Published by Lea & Febiger at \$7.00 per copy.

CLINICAL REVIEWS OF THE PITTSBURG DIAGNOSTIC CLINIC—Edited by H. M. Margolis, M.D. Published by Paul B. Hoeber, Inc., at \$5.50 per copy.

TURNER'S PERSONAL HYGIENE—By Clair Elsmere, Dr. P. H., Professor of Biology and Public Health in the Massachusetts Institute of Technology. Published by The C. V. Mosby Company at \$2.25 per copy.

INFANTILE PARALYSIS AND CEREBRAL DIPLEGIA—By Elizabeth Kenny, of the Elizabeth Kenny Clinic, Brisbane, Australia. Published by Angus & Robertson Limited.

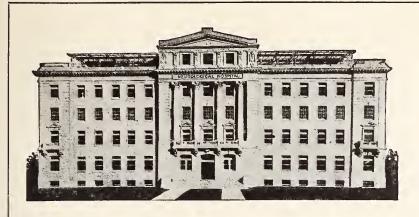
PEDIATRIC DIATETICS—By M. Thomas Saxi, M.D., Associate and Lecturer in Diseases of Children, New York Post-Graduate School, Columbia University. Published by Lea & Febiger at \$7.00 per copy.

INTERNATIONAL CLINICS—Volume II—Edited by Louis Hamman, M.D., Visiting Physician, Johns Hopkins Hospital, Baltimore, Maryland. Published by J. B. Lippincott Company.

THE 1936 YEAR BOOK OF PEDIATRICS—Edited By Dr. Isaac A. Abt, professor of pediatrics, Northwestern University Medical School. Published by The Year Book Publishers, Chicago, at \$2.50 per copy.

INTERNATIONAL CLINICS—Edited By Dr. Louis Hamman, visiting physician, Johns Hopkins Hospital, Baltimore, Maryland. Published by J. B. Lippincott Company, Philadelphia.

PHYSICAL THERAPEUTIC METHODS IN OTOLARYNGOLOGY—By Dr. Abraham R. Hol-



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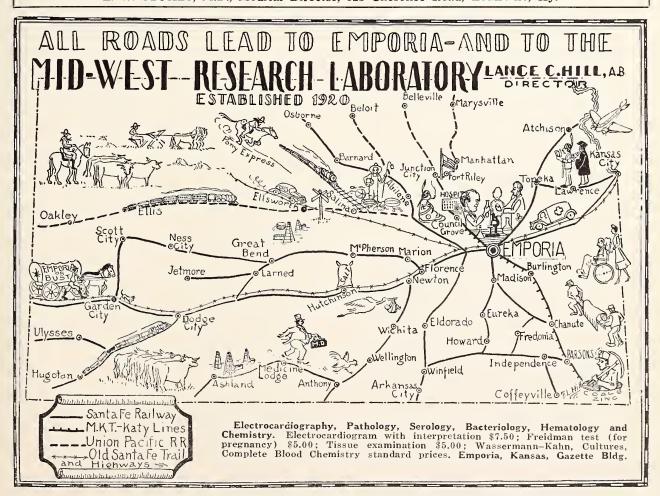
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lender, associate in laryngology, rhinology, and otology, University of Illinois College of Medicine. Published by The C. V. Mosby Company, St. Louis, at \$5.00 per copy.

THE MANAGEMENT OF OBSTETRIC DIFFICULTIES—By Dr. Paul Titus, obstetrician and gynecologist to the St. Margaret Memorial Hospital, Pittsburgh, Pennsylvania. Published by The C. V. Mosby Company, St. Louis, at \$8.50 per copy.

JUVENILE PARESIS—By Dr. William C. Menninger, Menninger Clinic, Topeka, Kansas. Published by The Williams & Wilkins Company, Baltimore, at \$3.00 per copy.

A HAND-BOOK ON OCULAR THERAPEUTICS—By Dr. Sanford R. Gifford, professor of ophthalmology, Northwestern University Medical School, Chicago, Illinois. Published by Lea & Febiger, Philadelphia.

DIETETICS FOR THE CLINICIAN—By Dr. Milton Arlanden Bridges, director of medicine, Detention, Rikers Island and West Side Hospital, New York. Published by Lea & Febiger, Philadelphia, at \$10.00 per copy.

THE 1936 YEAR BOOK OF EYE, EAR, NOSE AND THROAT—By Dr. E. V. L. Brown, University of Chicago; Dr. George E. Shambaugh, University of Chicago; and Dr. Louis Bothman, University of Chicago. Published by the Year Book Publishers, Chicago, Illinois, at \$2.50 per copy.

TEXTBOOK OF MEDICINE—By Dr. Charles Phillips Emerson, research professor of medicine, Indiana University. Published by the J. B. Lippincott Company, Philadelphia, at \$12.50 per copy.

THE 1936 YEAR BOOK OF DERMATOLOGY AND SYPHILOLOGY—By Dr. Fred Wise, Professor of Clinical Dermatology and Syphilology, New York Post-Graduate Medical School and Hospital of Columbia University, and Dr. Marion B. Sulzberger, Associate Professor of Clinical Dermatology and Syphilology, New York Post-Graduate Medical School and Hospital of Columbia University. Published by The Year Book Publishers at \$3.00 per copy.

A HANDBOOK OF AMBULANT PROCTOLOGY —By Dr. Charles Blanchard, Published by Medical Success Press at \$5.00 per copy.

THE 1936 YEAR BOOK OF OBSTETRICS AND GYNECOLOGY—By Dr. Joseph B. DeLee, Professor of Obstetrics, University of Chicago Medical School and Dr. J. P. Greenhill, Professor of Gynecology, Cook County Graduate School of Medicine. Published by The Year Book Publishers at \$2.50 per copy.

ENDOCRINOLOGY—CLINICAL APPLICATION AND TREATMENT—By Dr. August A. Werner, Assistant Professor of Internal Medicine, St. Louis University School of Medicine. Published by Lea and Fegiger at \$8.50 per copy.

LIGHT THERAPY—By Dr. Frank Hammond Krusen, Associate Professor of Physical Medicine, The Mayo Foundation, University of Minnesota. Published by Paul B. Hoebber at \$3.50 per copy.

THE 1936 YEAR BOOK OF GENERAL THERA-PEUTICS—By Dr. Bernard Fantus, Professor of Materia Medica, Pharmacology and Therapeutics, University of Illinois College of Medicine, and Dr. Samuel J. Nichamin, Associate Attending Physician, Cook County Hospital. Published by the Year Book Publishers at \$2.50 per copy.

OPERATIVE SURGERY—In two volumes. By Dr. J. Shelton Horsley, Attending Surgeon, St. Elizabeth's Hospital, Richmond, Virginia, and Dr. Isaac A. Bigger, Professor of Surgery, Medical College of Virginia. Published by C. V. Mosby Company at \$15.00 complete.

MEDICAL UROLOGY—By Irvin S. Koll, M.D., Attending Urologist, Michael Reese Hospital. Published by The C. V. Mosby Company, at \$5.00 per copy.

PHYSIOLOGY IN HEALTH AND DISEASE—By Carl J. Wiggers, M.D., Professor of Physiology in the School of Medicine of Western Reserve University. Published by Lea & Febiger, at \$9.00 per copy.

DIABETES: A MODERN MANUAL—By Anthony M. Sindoni, Jr., M.D., Chief of the Diseases of Metabolism at the St. Agnes Hospital. Published by Whittlesey House at \$2.00 per copy.

THE THYROID AND ITS DISEASES—By J. H. Means, M.D., Jackson Professor of Clinical Medicine. Harvard University. Published by J. B. Libbincott Company.

THE SOCIAL COMPONENT IN MEDICAL CARE—By Janet Thornton, Director, Social Service Department, Presbyterian Hospital, New York City, and Marjorie Strauss Knauth, M.D., Assistant Physician, Department of Medicine, Presbyterian Hospital, New York City. Published by the Columbia University Press, at \$3.00 per copy.

PREOPERATIVE AND POSTOPERATIVE TREATMENT—By Robert L. Mason, M.D., Assistant in Surgery, Massachusetts General Hospital. Published by W. B. Saunders Company.

THE 1936 YEAR BOOK OF NEUROLOGY PSYCHIATRY ENDOCRINOLOGY—By Hans H. Reese, M.D., Professor of Neurology and Psychiatry, University of Wisconsin Medical School: Harry A. Paskind, M.D., Assistant Professor of Nervous and Mental Diseases, Northwestern University School of Medicine; and Elmer L. Severinghaus, M.D., Associate Professor of Medicine, University of Wisconsin Medical School. Published by The Year Book Publishers at \$3.00 per copy.

SURGICAL PATHOLOGY OF THE THYROID GLAND—By Arthur E. Hertzler, M.D., Surgeon to the Agnes Hertzler Memorial Hospital, Halstead, Kansas, and Professor of Surgery, University of Kansas. Published by J. B. Lippincott and Company.

EXCHANGES

Decisions of Advisory Committee on Advertising of Cosmetics and Soaps.—The following general decisions of the Advisory Committee on Advertising of Cosmetics and Soaps have been released for publication:

1. The committee is unable to accept any statement to the effect that a product is nonallergic, allergen free or

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- 2. Such products as "skin fresheners" and "tissue creams" are not acceptable for advertising, because there is no evidence that tissue can be nourished or skin freshened by cosmetic preparations.
- 3. Hair or scalp tonics or lotions for which therapeutic claims are made, such as treatment of falling hair, dandruff or scalp infections, are not acceptable for advertising. (Preparations for therapeutic treatment of skin diseases come under the purview of the Council on Pharmacy and Chemistry and must comply with its rules.)
- 4. The composition of all cosmetics must be openly declared, either on the label or in literature which may be obtained on request from the manufacturer. In addition, the manufacturer must agree to furnish to any physician who makes inquiry the names of the dyes and their chemical composition and the names of the perfumes used in any of the cosmetic preparations.
- 5. The statement "Accepted for Advertising in Publications of the American Medical Association" may not be used in connection with a firm's product unless all the products referred to in the display or advertisement are acceptable for advertising. If all the products are not acceptable, then the firm must name the products which are acceptable for advertising.—Jour. A. M. A., June 12, 1937.

Gastric Cancer.—The presence of a definite familial trend—the high incidence of achlorhydria among the older relatives of patients with gastric cancer—points to some role of heredity in the aetiology of this disease. No such trend was noted among the persons who had any other localized cancer (uterus, breast, skin) and their relatives: among 45 in this group over 30, only 3 cases (6.7 per cent) had achlorhydria. It seems to us, therefore, that achlorhydria in the families of gastric cancer patients is one expression of the hereditary factors determining the particular localization of the growth. In some of the cases of gastric cancer achlorhydria appears to be a forerunner of the disease. (A. E. Levin, M.D., and B. A. Kuchur, M.D., The Lancet, Jan. 23, 1937.)

AUXILIARY

Edited by Mrs. W. G. Emery, Press Publicity Chairman

PRESIDENT'S MESSAGE

Greetings Auxiliary Members:

Home again after attending the 15th annual meeting of the Yoman's Auxiliary to the American Medical Association.

Atlantic City truly is the world's greatest playground where the board walk stretches for miles and the sandy beach seems endless. I still feel the tang of the salt on my cheeks and hear the sounds of the mighty Atlantic in my ears. An air of hospitality and friendliness prevailed everywhere. To meet representatives from the many sections of the country was a happy experience.

We as an organization are most fortunate in having as our president this coming year Mrs. Augustus S. Keck of Altoona, Pa. She is a woman of wide experience and very charming.

It is said the high light of the convention is the reading of the state reports. After hearing Mrs. Gloyne read our report I felt we were progressing as rapidly if not more so than some of the larger states.

Eighteen thousand five hundred and seventy-five auxiliary members were reported, an increase of three thousand and it is the first time in years all states have paid dues. With that manifested growing interest we should be optimistic regarding our future.

I am deeply grateful to the Auxiliary for the opportunity of representing Kansas and I wish each and everyone of you a most pleasant summer, incidentally a cool one.

Mrs. R. W. Urie.

My address is now Barnard. Kansas. Kindly send all communications to that address. No news items have been received for this issue and the business of moving and getting settled has precluded editorial items.

Mrs. W. G. Emery.

The Sedgwick County Auxiliary reports a board luncheon at the home of Mrs. Shaw. March 4. Several plans for future work and entertainment were discussed. Mrs. N. C. Nash was appointed chairman of the Committee on Cancer Control.

March 8 the Sedgwick County Auxiliary entertained at its annual guest-day "coffee" in the home of Mrs. D. W. Basham. Representatives from various civic clubs and friends of the members made an attendance of nearly one hundred. Mrs. H. N. Tihen reviewed her work this year on Hygeia. Mrs. J. E. Wolfe followed with a discussion of a Hygeia article. Dr. Fred McEwen spoke on "Startling Advances in Medicine." Mr. Paul Oberg gave several delightful piano selections. The Sedgwick Auxiliary added ten new members this past year.

Mrs. J. S. Reifsneider of 306 South Vassar entertained the board members of the Sedgwick County Medical Auxiliary at a spring luncheon at her home. Mrs. Bruce Meeker, President, presided.

Monday, April 12, members of the Sedgwick County Medical Auxiliary were entertained at a spring luncheon at the Innes Tea Room. Dr. C. A. Hellwig, local chairman of the American Society for the Control of Cancer. was guest speaker. Dr. Hellwig told of the work done in this field and also pointed out what the members of the Auxiliary could do to promote this project. Miss Mary Beal gave several delightful vocal selections.

Mrs. Wilfred Cox was elected President of the Sedgwick County Medical Society Auxiliary at its final luncheon meeting at the Commodore Tea Room. Mrs. Cox, who will take office in May, succeeds Mrs. Bruce Meeker, whose interest and leadership of the group has been so popular during the past year. Mrs. M. O. Nyberg, is President-Elect for a year hence. New officers of the auxiliary include: Mrs. B. C. Beal of Clearwater, Vice-President; Mrs. V. L. Scott, Secretary; Mrs. E. E. Tippin, Corresponding Secretary; Mrs. James Hibbard. Treasurer. Members of the Auxiliary entertained their

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husbands at a festive dinner dance Saturday evening, May 1, at the University of Wichita Commons. A one-act play was also presented.

The Labette County Auxiliary at a meeting March 23 in the home of Mrs. G. L. Maser chose the following officers: President, Mrs. G. L. Maser; President-Elect, Mrs. Mirl Ruble; Vice-President, Mrs. Charles Miller; Secretary and Treasurer, Mrs. G. W. Hay. After the business session Mrs. C. S. McGinnis read a paper on "New Developments in Medicine." Refreshments were served to twelve members and several special guests.



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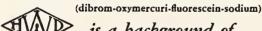
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REGIONAL ENTERITIS* A REPORT OF FIVE CASES

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In 1932, Crohn, Ginzburg, and Oppenheimer segregated from the group of the benign intestinal granulomata, a distinct clinical and pathological entity of the ileum. They designated this condition regional ileitis, and described it as a granuloma of the terminal ileum characterized by a cicatrizing, inflammatory process leading to stenosis of the diseased intestine.

The fact that reports of over two hundred cases have appeared in the American literature since the publication of the article is evidence of the great interest in this disease. Few subjects in present day medicine have created so much discussion among surgeons, internists, pathologists, and roentgenologists. It is a subject which merits the attention not only of specialists but of all physicians, since the specialist is not the one most likely to encounter the disease first.

Because the symptoms of this disease so closely simulate other conditions as appendicitis. and colitis, many cases undoubtedly were overlooked or incorrectly diagnosed and operated upon prior to 1932. The fact that appendectomy was performed in many of the reported cases from a few months to several years prior to a discovery of the true condition, indicates that this new disease entity is still not generally recognized. Even today, undoubtedly many innocent appendices are being removed while the real source of trouble is not detected by the operator. When there is any indication for suspecting the possibility of this disease, the surgeon should not be content with the formerly popular button hole incision, but

should be satisfied only with adequate exposure and thorough exploration. Following the classical article of Crohn and

his associates, there appeared reports by various authors of a similar lesion occurring elsewhere in the intestinal tract. This finding was confirmed by the original investigators and subsequently they reported that a similar disease process had been observed in the cecum and proximal colon. These cases have been designated by Crohn as the combined form of the disease. At present there is some doubt as to the clinical and pathological relationship of these variously located lesions, but the term "regional ileitis" does not seem sufficiently comprehensive. Various terms such as chronic cicatrizing enteritis, chronic ulcerative enteritis, and regional enteritis have been suggested. The last designation, regional enteritis, proposed by Brown, Bargen, and Webber of the Mayo Clinic seems to describe the condition best. While it is true, as in one of the cases reported here, regional enteritis may involve the jejunum or other intestinal segments, there is a definite predilection for the terminal ileum in a large majority of the

The typical signs and symptoms of this disease have been clearly described by Crohn and his associates, but for those not familiar with regional enteritis, its important characteristics are briefly reiterated. Since regional enteritis may so closely simulate appenditicis, and since so many cases have had appendectomy with failure to relieve symptoms, every physician should be familiar with the classical picture of the disease. This picture represents four distinct phases which may be grouped as follows:

Symptoms suggestive of acute intra-abdominal inflammation and especially appendicitis characterize the first phase of the disease. Pain and tenderness in the right lower quadrant, accompanied by cramps, fever, and leukocytosis occur. A palpable mass may be

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found. At operation the appendix does not appear to be involved, but one or more segments of the intestine and especially the terminal ileum appear to be enlarged, thickened, oedematous and reddened. Perhaps the most striking appearance on opening the abdomen in case three of this series were some enormous mesenteric glands in the region of the ileum. These glands are a typical finding in this stage of the disease and in this respect resemble the glands of mesenteric lymphadenitis except that the latter are smaller. They suggest the possibility that these two diseases of unknown etiology may be due to a low grade infection of the lymphatic system.

The symptoms of the second phase of the disease may simulate those of ulcerative colitis, with attacks of diarrhea and crampy abdominal pain. In fact these cases may go unrecognized for months or years all the while consuming large amounts of bismuth and bland foods. In some cases there may be loss of blood with resultant anemia, as well as malaise, fever and

weight loss.

The ulcerative phase is followed by a stenotic process. As a result of the extreme thickening of the intestinal wall, the lumen of the bowel gradually becomes constricted leading to signs and symptoms of partial intestinal obstruction. Shortly after eating patients may suffer from severe abdominal cramps with attacks of nausea and even vomiting. The pain may be so severe as to require morphine. Visible peristalsis may be observed.

In the last stage of regional enteritis, multiple fistulae develop that may either open internally or externally through the abdominal wall. Merely excising these fistulous tracks do not effect a cure, since it is necessary to resect the involved portion of howel

the involved portion of bowel.

While the disease may occur in either sex and at any age, the typical cases I have observed have been in young or middle aged adults. In the reported cases, the disease has occurred twice as frequently in males as in females.

Roentgenological studies are invaluable in the diagnosis of this disease, and the roentgenologists, notably Kantor, deserve credit for their assistance in unmasking this strangely overlooked lesion. Kantor has called attention to the most characteristic roentgenological findings, namely, the "string sign", a fine line of barium the result of a greatly constricted lumen. X-ray studies may also reveal a filling defect just proximal to the cecum. There may be an abnormality in contour of the last filled loop

of ileum, and a dilatation just proximal to the lesion may occur in the intestinal loops.

The etiology of regional enteritis is unknown; neither cultures, blood studies nor the research laboratory have shown the cause. It has been suggested that it may be related to dysentery or that a fungus is responsible. Microscopic studies show acute, sub-acute or chronic inflammatory changes with giant epithelial cells present in the later stages.

The gross pathological appearance of the involved bowel depends upon the stage of the disease. It may be oedematous and hyperemic in the acute stage or greatly thickened and hard like a hose as in the later stages. The mesentery, besides containing enlarged glands, may be thickened with a tendency to bleed. The process may involve one or more segments of bowel.

Successful results in the alleviation of regional enteritis depend upon early recognition and the institution of proper treatment. Considerable evidence has accumulated to show that if recognized in the first stage, merely side tracking the loop of diseased intestine may effect a cure.

When case three in this series came to operation, he was in an extremely emaciated condition weighing only eighty pounds. Three months before he had been operated upon elsewhere for appendicitis. His attacks of abdominal cramps had persisted and further exploration was considered advisable in view of roentgenological and clinical findings suggesting regional enteritis. This tentative diagnosis was confirmed at operation, but on account of the patient's poor condition, I did not consider a resection advisable, and merely anastomosed a section of the healthy ileum above the lesion with the ascending colon. Over a year has now elapsed, the patient has gained fifty pounds, eats whatever he desires and is free from symp-

Recently, I presented this subject before the Western Surgical Society reporting four cases from the Jackson Clinic, sixty-four from a survey of the members of the society and one hundred and fourteen which have now appeared in the American literature since 1932.* In a study of these cases, I was impressed by the number in which favorable response followed conservative ileocolostomy.

If the disease has reached an advanced stage, however, such as the stenosing phase, only re-

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section will suffice and this procedure may have to be repeated as in one of my brother's cases. However, even in the later phases of regional enteritis, it may be advisable to perform conservative surgery by one or more stages. It is only fair to state that the side tracking procedure has not always proved satisfactory even in the early stage of the disease, and that the process has in some instances progressed requiring further and more radical measures.

In conclusion, I should like to emphasize the

following points:

While regional enteritis was recognized as a distinct entity but five years ago, there have now been reported 219 cases in this country. Undoubtedly, many more cases have been diagnosed but not reported.

Although its etiology is obscure, early recognition with proper surgical measures results in prompt relief of symptoms and probably cure.

The signs and symptoms closely simulate acute appendicitis, ulcerative colitis, partial intestinal obstruction and ileo-cecal tuberculosis depending upon the stage of the disease.

The majority of cases reported have previously had appendectomy performed with failure to relieve symptoms. This emphasizes the importance of a careful diagnosis in every abdominal case coming to surgery and imposes upon the surgeon the necessity of a thorough abdominal exploration when conditions so indicate.

Roentgenological findings are characteristic and an invaluable aid to diagnosis.

The type of operation to be performed depends upon the individual case.

For the presentation of the following case reports, I am indebted to Drs. Harold Marsh and J. Newton Sisk for their aid in diagnosis and to my brother, Reginald, for the cases on his service.

CASE REPORTS

CASE NO. 1. FEMALE. AGE 56.

When 29 years old, had several attacks of right lower abdominal pain with vomiting and diarrhea. Exploratory operation performed by R. H. Jackson showed appendix not acutely diseased. Terminal ileum was thickened and oedematous, but was not resected. This now appears to have been the first stage of a regional enteritis.

The patient continued to experience attacks of abdominal cramps and vomiting at frequent intervals until 1922. She was free from pain until 1929 when the attacks of pain became severe enough to require morphine. Visible peristalsis indicated a probable chronic intestinal obstruction and operation was advised. The terminal two feet of ileum and the cecum were found to be very thick-walled and leathery with enlarged mesenteric glands. All the diseased bowel was resected. For the next five years, the patient remained well, then she suffered a recurrence of the same symptoms.

Roentgenological studies revealed a loop of ileum proximal to the anastomosis with the ascending colon with a lumen reduced to 1 cm. or less in diameter. Moderate dilatation appeared



Fig. 1. Case 3. Patient one year following ileocolostomy after gaining fifty pounds.



Fig. 2: Pathological speciment Case 1. Showing great thickening of intestinal walls and narrowing of lumen.



Fig. 3. Characteristic "string sign" roentgenological picture.

proximal to the contraction. The lesion was diagnosed as an inflammatory infiltration in the wall of a loop of distal ileum and operation was again advised. The last three feet of ileum was found to be in a similar state as noted in the second operation. Over five feet of terminal ileum, the ascending and one-half the transverse colon were resected; side to side anastomosis was done, and the patient has remained free of symptoms to date.

CASE NO. 2. MALE. AGE 57.

This case operated on by my brother and myself in 1927 first aroused my interest in this subject. For several months this man had been growing weaker because of a marked loss of weight, the result of spells of severe abdominal pain accompanied by vomiting and diarrhea. Fever 100° to 101° occurred with the attacks and secondary anemia was noted.

Exploratory operation revealed a similar condition to that observed in case 1, except that the jejunum and even the duodenum was involved. Again large mesenteric glands were seen. The patient survived a year.

CASE NO. 3. MALE. AGE 26.

At the age of 26 the patient complained of attacks of abdominal cramps shortly after eating for several months. Appendectomy had been performed elsewhere without relieving symptoms. In the meantime, the patient had lost weight steadily until he was in an emaciated state. Accompanying the attacks of abdominal cramps were spells of diarrhea. A small mass was palpable in the right lower quadrant. X-ray examination revealed a typical string sign appearance of the terminal ileum with retention proximal to the defect. The clinical and roentgenological studies indicated a case of regional enteritis. Operation revealed the characteristic findings involving the terminal ileum as well as another segment proximal to this. The mesenteric glands were striking in appearance. A short circuit anastomosis was done between normal ileum and the ascending colon. One year later the patient had gained fifty pounds and was free of all symptoms.

CASE NO. 4. FEMALE. AGE 16.

Following a three months history of attacks of abdominal cramps and vomiting this patient finally underwent appendectomy elsewhere when one of the attacks had localized in the right lower quadrant. The surgeon reported that on opening the abdomen, he encountered an agglutinated mass of small bowel around

the appendiceal region and in removing the appendix, a small abscess in the meso-appendix was opened. The appendix, however, was not perforated. Appendectomy did not relieve the attacks of pain and vomiting. There developed a secondary anemia, loss of weight, and a persistent fever 100° to 101°.

Roentgenological studies indicated an obstruction at the ileocecal valve and a clinical diagnosis of regional enteritis was made. Operation disclosed a hose-like thickening of the terminal ileum and this together with half of the ascending colon was resected and a lateral anastomosis performed. This patient has remained well to date.

CASE NO. 5. FEMALE. AGE 35.

This patient stated that for several months she had suffered from attacks of abdominal cramps shortly after eating. Vomiting and diarrhea did not occur. Nothing abnormal was noted at physical examination. X-ray study showed conspicuous evidence of canulization of a loop of distal ileum immediately prececal ("string sign"). A filling defect in the distal ileum was also observed. A clinical diagnosis of regional enteritis was made but has not yet been confirmed by operation.

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UTERINE BLEEDING AFTER FORTY* ANALYSIS OF 166 CASES

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Irregular uterine bleeding is of such common occurrence at the menopausal age, that many women believe it is of little significance. This belief is responsible for many cases of malignancy, seeking advice when the disease is past all hope of cure.

What constitutes a normal, what an abnormal type of bleeding at this period of life? A gradual loss of menstrual function, a decreased flow, recurring at prolonged intervals, is much more common in the normal menopause than is a sudden termination. There are three types of abnormal bleeding. First: menorrhagia, i.e. increase in the amount of flow,

shortening of the intermenstrual period or prolongation of the flow. Second: metrorrhagia with intermenstrual bleeding. Third and most important: reappearance of bleeding six months or more following complete cessation of menstruation. While it is admitted that exceptionally any of these types may occur during a normal menopause, abnormal bleeding should never be attributed to menopausal instability, until any anatomical lesion has been excluded by careful examination.

In order to treat bleeding after the age of forty intelligently, it is essential that one be familiar with all those conditions which may be responsible for it. In an analysis of 166 cases, operated upon at St. Francis Hospital, Wichita, Kansas, eighteen different conditions were found as underlying factors. From the clinical and anatomical study of these cases, it is evident that there are no clinical symptoms which alone can be relied upon to diagnose any of these lesions.

Certain characteristics of the hemorrhage may be valuable in determining the nature of the causative lesion. Menorrhagia without bleeding during the intervals between periods is hardly ever of malignant origin. In our series of 166 cases, seventy-seven women had menorrhagia and only in one was it caused by cancer. This type of bleeding was most often due to myomas and functional disturbances. situation is different in the presence of intermenstrual bleeding, since malignant as well as benign lesions may produce it. Of fifty-two women who had metrorrhagia, five had malignant lesions. The highest number of cancer cases was observed in the group complaining of postmenopausal hemorrhage. Among thirtyseven patients with this type of bleeding, sixteen (forty-three and three tenths per cent) cancer cases were listed.

The incidence of benign and malignant lesions differs therefore strikingly in the premenopausal and postmenopausal group. Before the time of menopause, the bleeding was of benign origin in ninety-three and eight tenths per cent of the cases, while after the menopause, malignant lesions were responsible for the bleeding in more than forty-three per cent.

The location of the benign lesions causing bleeding shows considerable variation in the two groups. In the premenopausal cases, the benign lesions were located in the body of the uterus in eighty-seven and six tenths per cent. They were relatively infrequent in the cervix.

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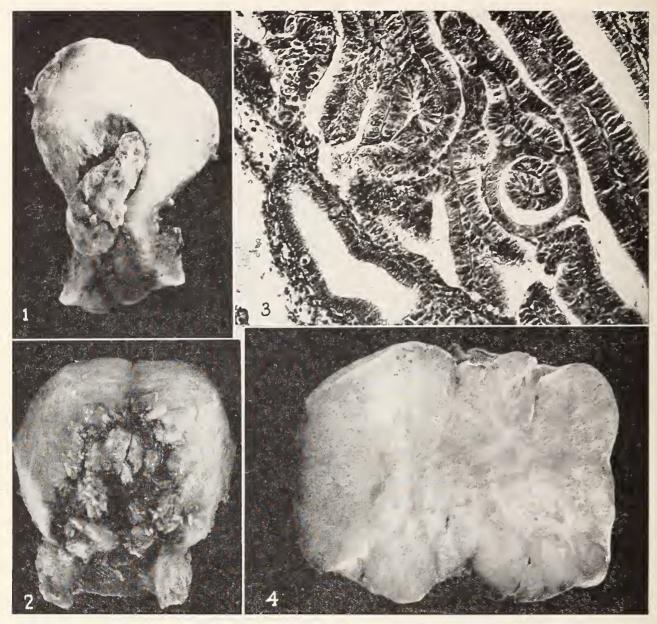


Fig. 1. Placental polyp causing uterine bleeding in 44 year old woman. After the age of forty disturbance of pregnancy plays a very small role as cause of uterine bleeding. It is well, however, to consider its possibility in the differential diagnosis to avoid unnecessary radical operations.

operations.

Fig. 2. Adenocarcinoma of the uterine body, operations.

Fig. 2. Adenocarcinoma of the uterine body, was the cause of postmenopausal bleeding in more than forty-three per cent of our cases. Many gynecologists consider panhysterectomy indicated without preliminary curettage in any postclimacteric metrorrhagia. The question arises whether the mortality of complete hysterectomy as a rou-

tine does not far exceed the prophylactic gain.

Fig. 3. Glandular Hyperplasia. It caused abnormal bleeding in about one-third of our premenopausal cases. The preoperative diagnosis was "myoma" in about one-half of the cases.

Fig. 4. Granulosa cell tumor, causing uterine hemorrhage in elderly woman. The cells of this type of tumor produce estrin in excess. The resulting hyperplasia of the endometrium is the source of bleeding. The effect of the granulosa cell tumor on the uterine mucosa, is one of the strongest arguments for the theory that hyperestrinism is the cause of glandular hyperplasia of the endometrium.

After the menopause, benign lesions of the cervix caused bleeding in one-third of the cases. In the premenopausal group, the incidence of cancer of the cervix was as high as that of the fundus, while after the menopause, cancer was twice as often found in the fundus than in the cervix.

During the premenopausal age, abnormal bleeding was due to uterine myomas in fortyone and one tenth per cent of the cases, as

compared with only eight and one-tenth per cent in the postmenopausal group. The development and growth of a myoma are dependent upon ovarian function. With cessation of this function, regression of these tumors occurs and myomas never develop in a normal uterus after the menopause. The bleeding from a myomatous uterus is prior to the menopause mostly due to disturbed ovarian function causing endometrial hyperplasia. After the meno-

TABLE I

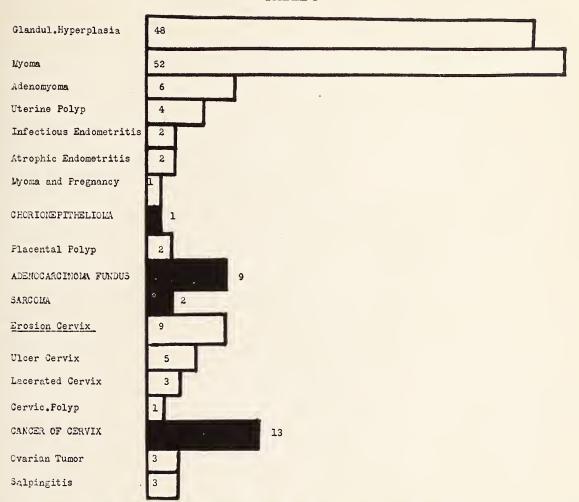


Table I. Lesions in 166 cases of uterine bleeding after forty. Malignant lesions black.

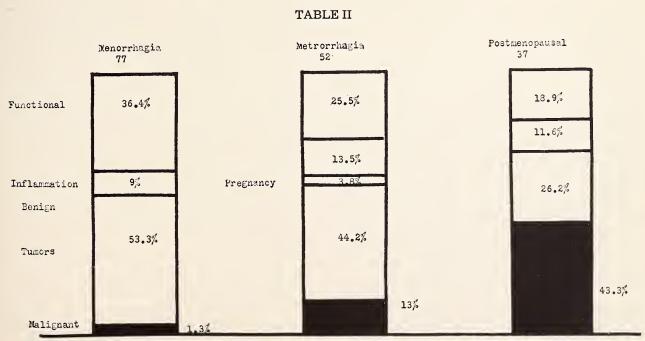


Table II. Incidence of lesions in 166 cases of uterine bleeding; menorrhagia, metrorrhagia and postmenopausal bleeding differ markedly in the incidence of malignant lesions (black).

pause, the usual causes of hemorrhage from a myomatous uterus are degenerative changes in the tumor itself, its projection into the uterine cavity or malignant degeneration.

Next to myoma, functional endocrine disorders play the most important role in the premenopausal bleeding. Thirty-one and nine tenths per cent of our premenopausal cases belonged in this etiological group. The clinical diagnosis of endometrial hyperplasia is apparently difficult. In more than half of our functional cases, the preoperative diagnosis was incorrect and hysterectomy was performed in forty-five per cent, mostly under the diagnosis of myoma. The microscope almost invariably reveals a picture characterized by an increase in the number of both the epithelial and stromal elements. Some of the glands are large and cystic, others very small. The cells are high columnar and there is no evidence of secretory activity. In some cases, the curette may bring away large quantities of the tissue so that, if the patient is of the cancer age and if the surgeon is unfamiliar with the gross appearance of benign and malignant lesions of the endometrium to bleed is not definitely known. the wrong diagnosis of cancer. In other cases. the scrapings may be small, but the microscopic picture is the same.

Bleeding of the functional type is a response of the endometrum to a disordered ovarian function. There is in the ovaries of these cases an absence of the corpus luteum and a presistence of Graafian follicles. The content of the large follicles stimulates the endometrium beyond its normal interval stage to the hyperplastic stage. Just what causes such an endometrium to bleed is not definitely known. Often one sees in the hyperplastic endometrium small areas of necrosis which may account for the hemorrhage. Since overabundance of estrin is the accepted cause of endometrial hyperplasia, the proper procedure is to bring about a cessation of ovarian function, not by operation but by radiotherapy. The treatment of functional bleeding by radiotherapy gives in most cases brilliant results. Hormone therapy has a good theoretical foundation in endometrial hyperplasia, the practical results are, however, disappointing. It would seem rational to treat these cases by giving corpus luteum extract, since an abnormal amount of follicle hormone and the absence of the corpus luteum hormone is apparently the underlying cause of endometrial hyperplasia. Unfortunately, the active principle of the corpus luteum is not yet available in any suitable form.

There is even a certain danger connected with the use of endocrine substances. During the past years, tremendous strides have been made in gynecological endocrinology. The advertising of endocrine products for the treatment of uterine bleeding may induce the physician to give ovarian or pituitary substances to control the bleeding without making sure, by careful pelvic examination, that the hemorrhage is not due to an organic cause. Valuable time may be lost if the hemorrhage is caused by an anatomic lesion.

Pelvic examination alone allowed a correct preoperative diagnosis in about one-half (forty-eight and nine tenths per cent) of our cases. Diagnostic curettage or biopsy was regarded as necessary in sixty cases (thirty-six and one tenth per cent). It revealed benign lesions in forty-six and malignant in fourteen patients. Cancer was present in twenty-five cases of our series (fifteen per cent). It was diagnosed by clinical examination alone in eleven, or less than one half. These cases were so advanced that the prognosis was poor. Only in lesions which on clinical examination can be considered suspicious, may we expect a fair percentage of permanent cures.

It cannot be emphasized enough that the outlook in cancer depends almost entirely on early recognition. It is not the method of treatment which determines the fate of the patient nearly so much as the stage of the disease. In the present state of our knowledge we can increase our proportion of cancer cures only by educating women as to the possible significance of abnormal bleeding beyond the age of forty and by thorough examination of every woman who presents herself with suspicious symptoms.

In early cancer no clinical system can be relied upon. No amount of clinical experience can take in suspicious lesions the place of accurate microscopic diagnosis. If we are to avoid unnecessary operations in functional disturbances and incomplete operations in malignant conditions, biopsy and diagnostic curetting will be indicated frequently.

The total amount of mined radium in the world (produced since its discovery by Pierre Curie in 1898), while not accurately catalogued, is generally estimated to be less than one and one-half pounds, or not quite 600 milligrams, not enough to make up a two-inch cube. Its value at current prices, is about \$15,000.000.

PROMPT REPORTING AND COOPERATION WITH COMMISSIONS*

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The major part of the burden caused by industrial accidents is an obligation which must be borne by industry. This proposition is no longer seriously questioned. Upon this principle benefits for disability or death because of accidents (and in some states because of occupational diseases) which arise out of and in the course of employment are the inherent right of workmen and are not philanthropy or charity to be doled out by a benevolent employer.

As an assurance that such benefits shall be adequately provided, workmen's compensation laws were enacted. To carry out the underlying theory of the laws completely and at the same time to stay within the law, the proper and reasonable administration of the law by Industrial Accident Boards or Commissions, by employers, by insurance carriers and especially by the medical profession, is absolutely necessary.

The workmen's compensation act of any state provides two-fold benefits: first, competent and reasonably necessary medical, surgical and hospital treatment, and, second, compensation to the disabled employe or death benefits to the dependents of a deceased employe. While the payment of compensation is the most apparent purpose of the law, the primary effort of the law is, that by the burden of its obligations it supplies the urge to prevent industrial accidents and to avoid those conditions of employment which cause industrial diseases.

A second primary purpose of the compensation law and one that is also more important than the payment of compensation, is the physical restoration of the disabled employe. The return to a self-sustaining, and when possible, to full earning capacity, is of tremendously greater value to a worker than any amount of compensation benefits that might be paid. It is, therefore, self-evident that the medical profession is a controlling factor in a compensation case because proper and sufficient medical treatment is of first importance in the process of rehabilitation. The speed with which medical treatment is rendered and the

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more proficient and skillful the medical attendance which is furnished, the more complete will be the attained rehabilitation.

Workmen's compensation laws usually place the cost of medical attendance and treatment upon the employer. In many states, because of this obligation, the employer is granted the right to name a panel of doctors from which the employe may select the physician or surgeon who shall treat and attend him. This provision operates, at least to some extent, to take from the injured employe the age-old privilege of selecting the physician who is to attend him and, to the same degree, to give to the employer the choice of the physician in whose care the employe is placing not only the repair of broken limbs, but of life itself.

There are certain well-founded reasons for giving to the employer and placing upon him the responsibility of furnishing proper medical attendance for the care of the injured. First, the employer, for purely selfish reasons, is interested in the speedy recovery of the employe with the least possible permanent disability in order to reduce compensation costs. For this reason, if for no other, the employer is more likely to provide the best available medical treatment. Second, the injured man sustains a disabling injury usually not more than once in his life-time and because of this lack of contact does not possess knowledge as to the qualifications of physicians or surgeons. On the other hand, the employer of even as few as from fifteen to fifty workers, generally has better knowledge of the specialties and qualifications of available physicians and surgeons. Consequently he is in a position, not only to furnish medical treatment promptly, but, because of experience, is able to secure the care and treatment which each particular case demands.

While as indicated, the employer has much to do with the selection of the physician or surgeon for the care of an industrial injury or disease, in these states there still remains some choice on the part of the employe. He need not accept the service of one doctor if that doctor is the only one offered unless no other is available in the community. The employer is required to present the employe with a panel of names from which a choice may be made.

Because of the progress which has been made in industrial surgery and because more and more doctors have given much of their time and study to a better understanding of the problems involved, this provision of the compensation law is being invoked less than formerly. Today, it is the rule rather than the exception, that the employe is permitted to engage the services of any doctor without the intervening tender of a panel.

Because of these various considerations and even in states in which the employe may freely choose his doctor, the position of the physician under the workmen's compensation law is unique. The relationship of a physician to his patient is one of the most confidential of relationships in human life and has always been treated as an exclusive privilege. In cases of sickness or injury, in order to obtain the best results, a person must place himself in a position of complete dependence upon his physician. Therefore, under workmen's compensation the assumes a position of great physician responsibility; he has been selected, or is paid for his services, by one (the employer) to undertake the care of another (the employe). His duty is two-fold: one to the injured, who places in him all his hope and faith, and the other to the employer, who pays him for his services. In view of this dual relationship, the physician is placed in a most unusual position and enjoys a privilege not possessed by any other class of men or profession. It is well, therefore, for the doctor to remember that although he is paid for his services by the employer, he nevertheless is the employe's physician, because it is the employe who is to be adequately treated and adequately and fairly compensated.

The first consideration which the attending physician should give in the treatment of his case, is to give that treatment which is most likely to result in the best possible physical restoration. To this end the old adage that two heads are better than one has special application. In serious cases where there is question as to what ought to be done or when the case may be out of the field of the experience of the attending physician, consultation is desirable. Under such circumstances, the advice of another physician, and, more particularly, of a specialist, should be sought and when tendered by the employer or insurance carrier, should be welcomed without any thought of the attending physician being subordinated in the case.

As a definite part of treatment in order to accomplish speedier and more complete rehabilitation, the facilities of curative workshops may be valuable. It is my experience that these workshops have materially reduced the periods of temporary total disability and have also lowered the amount of ultimate permanent impairment. Of course, physiotherapy should always be done under the direction of a physician. Under such proper direction, the physician should make use of any well-equipped workshop if reasonably available.

The attending physician plays a most important role and has a very important duty to perform at the end of the healing period. In view of the fact that compensation benefits are only a fraction of the actual wages of an injured man, it is extremely important to the injured himself that he return to work as soon as possible to stop the daily loss represented by the difference between his full wage earnings and what he gets as compensation. The early return to work is likewise important to the employer who is meeting the compensation liability. It is this point over which there arises considerable controversy between the injured employe and the employer or the employer's insurance carrier.

The surgeon should always have this crucial time in mind in the treatment of his case. The injured has, up to this time, not only suffered the pains of his injury, but has himself suffered from the loss of a full pay envelope, sometimes resulting in the curtailment of even the necessities of life, not only for himself, but for his entire family. At this moment in his life, he is not particularly happy because he is thinking of a return to work with his new handicap and with many limitations. In order to meet this crisis in the care and treatment of the injured man, it is vital that the attending physician truly gain the confidence of his patient, that confidence which a patient gives to a private surgeon. It becomes, therefore, apparent that in the handling of a case the surgeon must convince the employe of his complete fairness and impartiality. If he has shown in his conduct that his interest is in his patient, the employe will, ordinarily, take his advice and the return to work will be accomplished as an incident of treatment.

When an injured employe returns to work, the physician owes two definite obligations. The first is to the injured employe. The worker should be definitely advised not only as to the class of work he is able to do for wage earning purposes, but, more particularly, the kinds of work it will be well for him to refrain from and also the kinds of work actively to engage in, in order to bring about the best possible rehabilitation. The physician's second duty is to give the same instructions, most emphatic-

ally, to the employer, either directly or through a representative of the insurance carrier. In this respect the foreman in whose charge the injured employe's work is done, should be impressed with the fact that a man who has been injured and who consequently has some handicaps and limitations is now back at work and that he must do everything necessary to complete the treatment of the case under the supervision of the attending physician. The injured employe should not be required, upon return to work, to fight his battle alone, not only with his own aches and pains, but with the foreman who may not be entirely in sympathy with him and who does not want him, a physically unfit man, in the plant. Too often the attending physician makes a report at the end of the healing period to the agency which pays compensation and leaves the adjustment of the injured to employment to the hazard of misunderstanding, both from the standpoint of the injured and the foreman. It frequently occurs that an injured man is not told by his attending physician that he is able to return to work, nor is any report made to the employer or insurance company of the kind of work which the injured can do. The situation then becomes ripe for an argument and a subsequent contested case. Much can be done to bring about not only a harmonious relationship between the injured and the employer, but also a proper termination of the period of temporary. total disability and a proper adjustment of compensation by a frank expression both to the injured employe and to the employer.

Under all compensation laws an injured employe is required to resume some suitable form of work as soon as he can. The mere healing of wounds does not terminate the socalled "healing period" and before the physician leaves his case he should be able to convince his patient that he is able to resume the form of work available to him, taking into account the kinds of work he was able to do before his injury. If he has maintained that proper attitude which the ethics of his profession toward the sick and infirm requires, he will be able to accomplish this end. In most cases, of course, the injured has been away from work for a long period of time and it is difficult for him to resume work, even aside from the disability that results directly from the injury. This, together with the actual physical defects, makes it doubly hard for the injured to return to work and in such cases it is usually well to

advise the lengthening of the period of total temporary disability for several weeks and sometimes, as a rehabilitation measure, even when the employe has actually returned to work

I trust it may not be out of place at this point for a layman to give a word of caution as to the handling of certain cases, namely, the possibility of neurosis following an injury. Needless to say, a true neurosis, while it is a result of some quirk of mental reaction, is nevertheless real. This condition almost always presents a difficult and pitiable problem for solution. A sad feature of the case is the fact that often the condition is brought about by some indiscrete suggestion from those who have the injured employe's interests most at heart and, yes, even by attending or examining physicians. Doctors knowing the possibilities of the development of a neurosis, can do much in their contacts with the injured and with members of his family to reduce the toll in this regard. Here again the building up of complete confidence in the ability and, especially, in the integrity of the attending physician plays an important role.

The compensation law provides for the payment of compensation not only during the period of temporary total disability, but also for permanent disability. In the determination of such permanent disability, all interested parties must depend upon the opinion of the physician. While it may be true that laymen and particularly members of an accident board or commission and those who have to do with the administration of compensation laws acquire some knowledge as to the kinds of disabilities that follow from certain injuries, in the last analysis the determination of just what disabilities are sustained is peculiarly in the field of the medical profession.

The purpose of the compensation law is to give to the injured employe such benefits that he shall be adequately compensated for the disability occasioned by injury. The man who has been injured is not in a position to face the world in a happy mood and particularly so if compensation paid to him does not in a reasonable degree compensate for the disability sustained. When this important question to the employe is being considered, the surgeon should not forget that he is still the physician of a particular patient and in estimating disabilities should never take into account the fact that he is being paid for his services by another agency.

Human beings are usually fairly optimistic and particularly so when it comes to judging the results of their own acts. If we have pride in our work, and we ought to have, we are apt to think that our work probably could not be improved upon. Therefore, may I add a word of caution and suggest that the surgeon should not be too sanguine in judging the results of his own work. The results may have been the best obtainable, but because they are the best obtainable, it does not follow that an injured member has been restored to perfect normality. Therefore, the surgeon should be particularly alert to be impartial and fair in rating or appraising the disability, so as to give the injured man all that he is entitled to.

It is always well for the medical men to become thoroughly familiar with the compensation law of the state in which they practice and particularly with its administration, so that their reports and opinions may have meaning. But in estimating disabilities, the surgeon should never take into account the amount of money which is to be paid, but rather should give his estimate of disability and "let the chips fall where they may." Estimates of disability should always be based upon the ultimate result attained after the return to work.

At this point, it might be of interest to point to other facts which show that the medical aspect of any workmen's compensation act is very important. These facts are of particular interest and importance to physicians and surgeons as participants in this phase of the law.

In the administration of the workmen's compensation law, all compensable cases are required to be reported.

These reports include a statement of the entire medical costs involved in Wisconsin from September 1, 1911 to December 31, 1935, in the 396,379 cases reported, employers have paid \$18,779,395 for medical, surgical and hospital treatment. These figures do not include the many thousands of cases which involved less than three days disability but which required medical treatment. While we do not have a record of such cases, the medical costs were undoubtedly large.

I have heard that employers have criticized the medical profession, feeling that some doctors step up their bills under the system where payment is made sure by an insurance company. Medical bills have increased per case for a number of years as shown by the fact that in 1920 the average per case was \$35, in 1925 it was \$52, in 1930, \$70, while in 1935 it was \$50. The drop in 1935 is probably due to the fact that there was a decline in employment in the heavy industries during that period and consequently a reduction in the number of more serious accidents. While in some isolated cases the complaints may be well founded, I believe that the criticisms generally are not warranted and that the increase is due to the fact that better medical service is being given, resulting in shorter periods of total disability and in more nearly complete restoration of injured employes.

I now wish to discuss briefly compensation payable under the schedules contained in some compensation laws, as in Kansas and Wisconsin These schedules usually include amputations of various members or their parts and the loss of vision and hearing. Any injury short of amputation is compensated for on the basis of a relative loss. This means that the loss is estimated as being a certain percentage of the allowance as contained in the schedule for the next greater rated disability. For instance, a disability which is limited entirely to the function of the forearm from the elbow to the tips of the fingers is one comparable to the loss of an arm at the elbow and not to the loss of an arm at the shoulder.

While no general rules can be laid down for the estimating of the loss of function, there are certain injuries, or rather conditions, which are more or less classical, such as the ankylosis of a knee joint, or a definite shortening of a leg. But even such conditions in different persons result in some variation in the per cent of loss of function, depending upon the adaptability of the patient. It is clear that some men with an inch shortening of one leg are unable to overcome the handicap, while others go about their work without any apparent increase of effort whatsoever.

Within limitations, it is possible to establish by custom or rule the related disability applicable to a given handicap. The Industrial Commission of Wisconsin, after many hearings with physicians and in cooperation with the State Medical Society, adopted a schedule of related disabilities to serve as a guide in rating disabilities. For example, a loss of function represented by a limitation of active elevation of the arm in all directions to ninety degrees, but otherwise normal, is a loss of twenty per cent of the arm at the shoulder.

If other conditions exist, the percentage of disability varies more or less as the disability varies from this standard.

This schedule has served a very useful purpose and has resulted in a better common understanding of what is meant by relative losses. It has resulted in a more uniform approach to the rating or evaluation of disabilities.

Less than fifteen per cent of all cases under compensation in Wisconsin are actually heard by the Industrial Commission; that is, less than fifteen per cent result in disagreement as to the causal relationship between working conditions and disability or in the estimating of disability. In the remaining eighty-five per cent, the cases are closed upon the reports filed with the commission. When an injury occurs, the employer is required to file with the commission a report which contains answers to questions relating to the injury. When the case is finally closed, a final report must be filed by the employer together with a receipt signed by the employe. If the disability extends beyond three weeks, a physician's report showing the character of the injury and the disability sustained, both temporary and permanent, must also be filed. With these reports before it, the commission determines whether the injured is properly compensated. If all four documents are in agreement, the case is closed. The practice in many states is somewhat similar. In this plan of administration, you will readily see the importance of physicians' reports. whole question of whether injured men are being properly compensated rests almost exclusively upon the judgment of physicians and, therefore, it is extremely important that such reports be carefully prepared, that they be complete and competent, so that the beneficent purposes of compensation laws may be fully carried

One of the principal reasons for the enactment of a compensation law was to provide for the speedy payment of compensation. Since an employer or insurance carrier cannot be expected to pay compensation unless they are reasonably sure that compensation is due, it is extremely important that the attending physician make immediate report to the employer or insurance company after first being called on the case, setting forth the nature of the injury and the probable period of disability. The record of prompt payment of compensation in Wisconsin is good, but it certainly can be improved upon. A frequent reply to an

inquiry made to an insurance company as to why compensation payments are not made promptly is that it has not received and cannot get a report from the attending physician. As a protection to injured workmen this should not be. I am sure that if attending physicians realize the importance of prompt and complete reports they will cooperate in the plan of administration, so that the injured man, in addition to the suffering occasioned by injury, will not at the same time suffer from worry due to shutting off his income. For this very obvious and beneficent purpose, I cannot plead too forcefully or urgently to attending physicians to report their cases to proper agencies completely and understandingly.

Contested cases, which usually number about fifteen per cent of all cases naturally give boards or commissions the greatest worry and concern. The bulk of these cases can be classified into two divisions, the first covering the determination of temporary or permanent disabilities when injury definitely occurs and the second the determination of the question of whether or not the disability complained of is either the result of injury accidentally sustained or of occupational disease. In the determination of either of these questions, the determining body must depend almost entirely upon the testimony of the medical profession.

The first of these questions is not so difficult and becomes difficult only when physicians will not use good judgment either as the result of bias or other cause. When in a given case one physician estimates that a permanent disability is ten per cent loss of function of a leg at the hip and another estimates the identical disability at eighty per cent of loss of the leg at the hip, someone or maybe both are wrong. A leg cannot be disabled both ten per cent and eighty per cent at the same time.

Workmen have complained that doctors whose bills are paid by employers or insurance companies have discriminated unfairly against the workmen in under-estimating the degree of disabilities. Opposite complaints are made by employers against doctors who are employed by workers. There are doctors who apparently are influenced by the side for which they are reporting or testifying. Such "influenced" reports or testimony do not confer a favor upon anyone and least of all upon the insurance carrier, which must be guided only by the real facts in the case.

After some years of experience and after see-

ing probably as many if not more actual cases than any one physician may see, it would be strange indeed if those who administer compensation laws did not have some fairly good idea as to how disabilities should be measured. It is soon discovered whether or not a physician is giving to the case that unbiased thought and study which enables him to estimate disabilities properly and fairly. Physicians who do not, soon lose the confidence of the board or commission which must decide cases upon their testimony, and ultimately the confidence of their clients. Happily it can be said that members of the medical profession usually give honest judgment as to disabilities and that their estimates of disabilities are usually very close indeed.

The second field of controversy, which involves the question of whether or not the disability is the result of accident or occupational disease, offers more difficulty. As in the former class, boards or commissions must here likewise depend upon the medical profession. While medicine and surgery have made tremendous strides and particularly in the last half century, there is still much which medicine and surgery have not solved and which they do not know so far as cause and effect are concerned. In the determination of such questions it is important that the physician, who is called as an expert, give the scientific knowledge on the subject under investigation. Opinions based purely on conjecture have no probative force, whether they be on the one side or the other. The fair and unbiased scientist in any given set of facts will always give the reasonable probabilities from which a determination can be made. Boards or commissions are no more justified in arriving at a conclusion based upon the remote conjecture in the face of scientific probability in the case of a medical question, than they would be in arriving at a conclusion based upon conjectural inferences as to any other fact. Fanciful theories, on the one hand, that a condition is not the result of a definite injury in the face of a definite chain of events, or, on the other hand, that a disability may be due to injury when more reasonable causative factors are present, are of no particular value in the determination of medical questions.

It must be recognized that in the present state of medical knowledge there is bound to be a difference of opinion when the etiology and character of the disability is obscure. It is this very feature that renders some industrial cases peculiarly fascinating. However, this difference of opinion should never degenerate into partisanship. When it does, the physician ceases to be an impartial professional man and becomes an advocate, so that the value of his service to the administration of workmen's compensation laws becomes practically nil. For the purpose of determining medical issues, whether as a witness or when appointed to make an independent examination, it ought to be expected as a matter of course that the members of an old and honored profession will always give opinions really independent of their source of employment-fairly and impartially-and purely on the reasonable scientific probabilities applicable to the given situation.

If the foregoing analysis is correct, it must be apparent to all concerned in the administration of the compensation law, that its proper functioning depends largely upon the members of the medical profession. Because of the method of his selection, because the determination of compensation rights depends upon him, and because he is exclusively responsible for the physical restoration and rehabilitation of the injured employe, the physician who engages in industrial surgery must be continually on the alert to maintain an absolutely unbiased and impartial attitude. The whole success of the compensation law depends upon him and the whole future of many thousands of injured men each year depends not only on his skill, but upon his good judgment. It is to the great credit of the medical profession that compensation laws have generally worked out as successfully as they have. But "lest we forget", it is highly desirable that the medical profession shall steadily weed out its obnoxious members and that it shall ever be on the alert to keep its standards on a high level and, so far as the compensation laws are concerned, give to their administration that quality of judgment and attitude that will gain the fullest confidence of injured men and at the same time render to employers and to the public that impartial service to which they are entitled.

Scientifically medicine will undoubtedly progress. Economically and socially the future is less clear, but it can be safely assumed that the delights of accomplishment and the fascination of the problems of medicine will ensure happiness to its practitioners.—J. H. Musser, M. D., New Orleans, Louisiana, J. A. M. A., July 31, 1937.

RECENTLY ACQUIRED KNOWLEDGE OF CANCER METABOLISM

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In a brief review of recently acquired know-ledge of cancer metabolism, it will be difficult to include all the numerous papers which have appeared in the last decade. In order to summarize the most important findings in the field, many papers will not be mentioned and much work will not receive any comment.

In this country and abroad, the problem of cancer has received the utmost attention, as the mortality from neoplastic diseases is second only to heart diseases. Consequently, because of the larger number of scientists working on the subject the literature is very extensive, so that one can hardly embrace the entire field in a short article such as this. Numerous contributions and advances have been made concerning the knowledge of cancer and a definite science has arisen as a result of the large amount of work; namely, cancerology.

BLOOD CHEMISTRY

The protein metabolism does not show any important finding which could be assumed as characteristic of malignant disease. According to some authors, however, in cancer the blood acid base is disturbed, resulting in a definite condition of alkalosis, and examination of the mineral content reveals an increase in potassium of both blood and tumor tissues and a decrease in calcium. From these findings some rather unproved conclusions could be drawn of the vagotonic constitution of the cancer patient. No studies very conclusive of the constitution of the patients are yet at hand and the great variety of forms and individuals make such research rather difficult. Whatever the biotype, it must be considered that cancer is practically unknown in gout and other uricemic syndromes.

The lipid metabolism shows some definite changes in cancer with an increase of cholesterol, fatty acids and possibly phospatides. Ascoli points out that in blood lipoids the number of unsatisfied valences is greater than in any other disease. Leaving the carbohydrate metabolism, which will be taken up at a later point, we may say that the blood does not show any changes particular to neoplastic disease and those changes already mentioned are noted also in other diseases and cachexias.

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Some authors have pointed out that tissues in active growth produce acidosis and that in neoplastic processes the ph is lowered. Such findings have not as yet found confirmation. Several years ago the writer started a study of the ultra-microscopic study of the blood serum in malignant diseases. He noted a greater dispersion of the serum colloids than in normal subjects and in a large number of other diseases he could not find a similar picture. Such an investigation has been carried out by Fischer recently and very probably in the future the study of the serum colloids may lead to a more perfect knowledge of some of the pathogenetic factors. It would be interesting to note such a picture in the precancerous lesions and follow up the cases to demonstrate the relations.

The lack of magnesium in the organism of tumor-bearing animals has been very much stressed by Delbert, who has gone so far as to recommend the use of it in diet, as a prophylactic against cancer. This conception has not been generally recognized, as many have not been able to prove the conception of Delbet, and the magnesium has never delayed the growth of experimental tumors.

Erythrocytes have been found with a larger diameter than normal. Such a finding is particularly marked in carcinoma of the gastrointestinal tract, but it has been present very often in cases of malignant tumors other than gastro-intestinal carcinomas. The sedimentation rate is increased, but such tests have been used in too many pathologic processes to have a real diagnostic value in cancer.

HISTIOCHEMISTRY OF THE TUMORS

The proteins in the tumors are about the same and occur in the same proportions as in the normal tissues. There is not a definite proteic substance, which could be considered as specifically a cancer or malignant protein.

The tumor lipids are distributed in different ways in tumors, recent analyses showing that the center contains much more cholesterol, while the average phospholipids content of the periphery is twice that of the center. Such differences in content between center and periphery of a tumor are due to the fact that the center is a necrotic, non-growing tissue, while the growth is very active at the periphery. The carbohydrate metabolism in the neoplastic tissue is rather important, as on it Warburg has based the pathogenesis of the cancer. The presence of glycogen in the malignant cells is a very old finding but the demonstration of the aerobic

glycolysis is certainly due to the studies of Warburg. Normally, in a condition of anaerobism, as in some embryonal tissues and in the retina, the glycolysis replaces the oxidation. The cancer cell is different from the normal in that even in the presence of oxygen, the glycolysis will continue. The pathogenetic factor, according to Warburg, would be a condition of low oxygen tension, for which some tissue would take up an abnormal type of respiration or better lose the normal synchronism between glycolysis and oxidation, transmitting to their descendants also such abnormal character.

According to Warburg, if the disturbed respiration is not finally repaired, this trouble will be inherited from cell to cell finally producing tumor. It is well known that methylen blue may act as a catalyst and stimulate by its presence the respiration of tissue or blood. Cresyl blue thionine has the same effect on respiration but is preferable to methylen blue as it is less toxic and produces a greater increase in respiration. The increase of respiration is dependent on the presence of glucose and the R.Q. of the extrarespiration is unity. cancer cells apparently are able to oxidize completely the carbohydrates, if they are provided with an oxidation catalyst, but the presence of the dyes will not cause a simultaneous decrease of aerobic glycolysis.

Recently, Fabish has demonstrated that an aerobic glycolysis may be present also in the blood corpuscle of tumor-bearing animals and has been able to extract from the blood of tumor-bearing human beings, as well as from the organs of sarcomatous rats, some substances, probably fats or lipoids, causing an average increase of seventy-five per cent of aerobic glycolysis in normal human blood corpuscles.

The mineral content of the tumors shows here also an evident increase of potassium and a diminution of calcium, particularly in the tumors showing a rapid growth. Numerous enzymes are present in the malignant tissues and various behaviors are due to their presence. In tissue cultures, for example, the cancer cells do not need the presence of threphones (substances extracted from embryonal tissues and activating the growth, behaving like enzyme or catalyst), and have high potency in liquefying the plasma clot. Possibly the cancer cells have a special activating agent, which activates an enzyme in the plasma and is heat stable. The lipase activity of the organs in tumor-bearing animals has been found below the normal

figure, indicating that the lesion affects the entire organism.

Further study of the enzymes in cancer is certainly very promising for the knowledge of tumor metobolism as all metabolic activities are initiated or conducted through enzymes. We would go so far as to say that life is produced by the activity of enzymes or at least maintained by such.

According to some authors, (McCarty, Haumeder, etc.) the cancer cell represents a particular form of cells in which there is a special nuclear-nucleolar volume ratio. The nuclei and nucleoli of malignant cells are larger than those of regenerative tissues. The writer objected to such a conception that Sternberg cells, typical of a granulomatous process, are provided with very large nucleoli, possibly as large or larger than those commonly found in malignancy, and are characterized by a hypertrophic nucleus. On the other hand, the hemocytoblastic and the hemohistioblastic tissues are all provided with large nucleoli, so that in smears made from lymph glands, it would be impossible to differentiate these cells from the cancer cells. Other authors have also found no significant difference in the nucleolar volume for benign and malignant tumors.

Very important is a recent study which promises better results than histological grading of the tumors. The chemical or biological grading takes into account the cholesterol content of the tumors, which are divided on such a basis in four groups. There appears to be a definite relation between cholesterol and malignancy. The subject, however, needs more attention and further study.

EXPERIMENTAL CARCINOGENESIS

This is one of the most important chapters of the present development in cancer research. Those primitive methods, particularly the application of tar on the skin of mice, a practice which was rather empirical, have disappeared to be replaced by more scientific methods in which the agent used is known chemically and can be exactly measured and placed in whichever organ one chooses for the experiment.

Cook and his co-workers are the first who have been able to synthetize definite chemical compounds, capable of producing experimental cancer. We shall follow the classifications of these agents, as given by Cook.

- 1. Cholanthrene derivatives, which are related to the biliary acids.
 - 2. Benzpyrene, isolated from coal tar pitch.

- 3. Benzanthracene group, also derived from coal tar. To this group belongs the compound, 3:4:5:6 dibenzcarbazole, which is of interest, on account of its ready formation from beta-naphthylamine base which may be responsible for many cases of bladder cancer in the dyestuff manufactures (aniline cancer).
- 4. Phenanthrene group, in no way related with the precedents.
- 5. Azo compounds and particularly oaminoazotoluene, added to the diet.
 - 6. Styril quinoline derivative.
- 7. Inorganic compounds, zinc chloride and arsenic. This last should receive more attention from research workers and clinicians, due to the frequent use in the human therapeutics.
- 8. Radio-active compounds, which act partly through chemical and partly through their physical characteristics. To the group belongs the mesothorium, which has provoked in the hands of some experiments an osteogenic sarcoma.

Roffo has brought attention to the harmful effects of the sun rays which may produce skin tumors. It is a well known fact that sailors exposed to the sun rays for many hours of the day frequently develop skin cancers. In this process, the cholesterol must play a very important part because of its photoactive and heliotropic characteristics. As a matter of fact we have pointed out in a previous paragraph the frequent finding of a hypercholesterolemia in malignant diseases.

Another element of interest, which recently has received the increasing attention of scientists, is the production of cancer by means of oestrone. Lacassagne has devoted considerable time to the study of the oestrogenic influences in lower animals. Oestrone or oestrogenic compounds stimulate cell division in certain types of epithelium. The prolonged administration of it may lead in the majority of cases to adenocarcinoma of the breast, which is, according to Lacassagne, due to a special hereditary sensitivity to the proliferative action of oestrone. Generalizing this concept, one could draw the conclusions that possibly oestrone might be contained in many other glandular ducts which, as is well known, are the seat of origin of glandular cancer.

Some authors have pointed out that during oestrogenic treatment there is an enlargement of the anterior lobe of the hypophysis, which may sometimes reach the size and the characters of an adenoma. It is believed that the hyperactivity of the hypophysis is necessary for

more rapid growth and that destruction of the hypophysis by radium needles and other means leads to a slowing-down of growth. In the next paragraph we will discuss the last point. In many gastric, uterine, mammary and prostatic carcinomas some authors have been able to extract some hormonelike substances capable of producing a positive Ascheim-Zondek test (estrus and faint maturation). However, at this point, it is better to point out that some authors have noted an estrogenic activity of the hydrocarbons above mentioned as carcinogenetic agents.

A few words of explanation are necessary at this point. We have included hydrocarbons, cholesterol, biliary acids and oestrogenic substances, male and female sex hormones in this paragraph. It may seem rather confusing to the general practitioner to put together so many different elements. It will be easily understood when the chemical nature of these elements is Methylcholanthrene, a explained. carcinogenic agent, was formed synthetically from deoxycholic acid, one of the biliary acids, normally present in our organism. Cook was led to the synthesis by the elucidation of the chemical structure of cholesterol, which is a precoursor of the biliary acids and containes a phenanthrene group in his molecule. The same general relation exists between carcinogenic agents, male and female sex hormones, (which differ only by the presence in the male hormone of a CH3 group) and some vitamins... From such chemical links, similarities between these various substances some of which are an important part of our organism, deductions can be made as to obscure links between biliary acids, cholesterol, sex hormones and spontaneous benign and malignant tumors.

Before closing this paragraph, it is we'll to mention the possible inhibitory action of cysteine and other sulphydryl compounds on the growth of experimental tumors. These compounds stimulate proliferation, differentiation and organization of the cells, while carcinogenetic agents are known to inhibit differentiation and organization and increase proliferation. Some authors have deducted from these findings the conclusion that possibly cancer is due to disturbance of the metabolism of sulphur in our organism.

OTHER HORMONES

The hypophysis seems to play a very important role favorable to the growth of tumors. Several authors have demonstrated experi-

(Continued on page 362)

PRESIDENT'S PAGE

To The Members of The Kansas Medical Society:

The State Tax Commission has been faced with a difficult problem in setting up sales tax regulations for the guidance of the various business and professional activities of the state. I believe that the regulations which they have adopted for the medical profession are very fair from the standpoint of revenue for the state and a minimum amount of trouble for us. I wish to urge that we all familiarize ourselves with these regulations and cooperate both in the spirit and the letter of the law. If the explanatory yellow sheet sent you some time ago has been mislaid, you may obtain another copy from the executive office.

The Social Security Commission is active now preparing rules and regulations to carry out properly the provisions of the recently adopted Social Security Act. I urge the members of our different county medical societies to cooperate with the local county commissioners in carrying out these regulations.

Whether or not you are in favor of these acts, both Sales Tax and Social Security are incorporated in the state legislative program and will be put into force. It is our duty, both as citizens and as members of an outstanding organization in the state to do our bit in personally helping in the execution of these laws.

J. F. Gsell, M.D., President.

EDITORIAL

PSYCHIC POWERS

Representatives of organized medicine read with great interest the following resolution which was introduced in the Senate of the United States on July 22:

SENATE JOINT RESOLUTION NO. 188

To provide medical aid for the needy and for the stricken with illness who are unable because of poverty to provide treatment and hospitalization; also to establish all licensed medical practitioners as civil officers of National Government.

Whereas the Federal Government has recognized its social responsibilities to its citizens by the enactment of the Social Security Act; and

Whereas an extension of such responsibilities is necessary to provide adequate medical care and attention for the impoverished and needy to assure the full enjoyment of social security:

Therefore be it

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That all physicians and surgeons who practice the profession of medicine or surgery in the United States or its Territories are hereby declared to be civil officers of the United States for the purposes of this joint resolution.

Sec. 2. Any such physician or surgeon shall render such medical or surgical aid requested of him by any impoverished individual who is in need of such aid, and, where necessary, to order the hospitalization of any such individual. Any hospital to which such an order is directed shall, insofar as its facilities permit, provide for the hospitalization and care of any such individual in the manner best adapted to accomplish his recovery.

Sec. 3. Any physician, surgeon, or hospital rendering aid to impoverished individuals as provided in section 2 are authorized to make such charges for such aid as are reasonable and just. Bills for such charges shall be submitted to the Social Security Board, which is authorized

and directed to pay them, under such rules and regulations as it may prescribe.

- Sec. 4. (a) It shall be unlawful for any physician, surgeon, or hospital official or employee to refuse to render aid as provided for in this joint resolution, or to make exorbitant or excessive charges for such aid, or to make any charge against an individual to whom aid has been rendered in addition to the charge paid by the Social Security Board.
- (b) It shall be unlawful for any person fraudulently to represent that he is impoverished for the purpose of receiving aid under this joint resolution.
- (c) Any person violating any of the provisions of this joint resolution shall be deemed guilty of a misdemeanor and, upon conviction thereof, shall be fined not more than \$1,000, or imprisoned not more than three months, or both.
- Sec. 5. The Social Security Board shall have power to make such rules and regulations as may be necessary to carry out the provisions of this joint resolution.
- Sec. 6. There is hereby authorized to be appropriated such sums as may be necessary to carry out the provisions of this joint resolution.

They read with greater interest that the name signed to the resolution was that of Senator James Hamilton Lewis of Illinois.

They wondered what the Senator had in mind, since they so clearly recalled his remarks at the Atlantic City session of A. M. A. Remarks which were for the most part keynoted by the phrase, "I wanted to have some words with you, not to advise you, but to ask your advice . . ." (i. e. on the subject of plans for medical indigent care which would be acceptable to scientific medicine).

These representatives wondered also whether the Senator had misunderstood that organized medicine appreciated his counsel, that it stated its willingness to provide leadership in the important matters he described, and that in the thirty-two days which elapsed between his remarks and the introduction of the above resolution, organized medicine from one end of

the country to the other commenced study of his message with a view toward giving him the suggestions he asked.

It may be that a clue lies in the following anecdote which was reprinted recently in a Kansas newspaper—

"A charming Topeka woman—pretty and talented—met on a west bound train not so long ago the famous Sen. J. Hamilton Lewis. The old gentleman was quite impressed with his conversational companion, but insisted several times during their afternoon together on the club car and their evening in the diner and observation, that the Topeka woman was ill. She protested vigorously.

'But you are,' he said.

'Never have I felt better in my life,' she insisted. The following day she was taken to a hospital in Santa Fe, N. M., for an appendix operation.

'Not only is Senator J. Ham a great man, but he is a psychic,' she declares. 'That incident is one of many I have heard about.' ''

and that the good Senator's occular powers of things medical spoke plainly to him that he had found his answer alone and single handed.

THE COUNTY SECRETARY

In the organization of medicine to promote the cause of medical science and the joint and indivisible interest of the physician and patient, the real base is the county secretary. He collects the dues: not infrequently he arranges the program; he keeps the books and writes the minutes; he gives of his time to see those citizens who would have the county society consider this or that health program, and he orders the dinners and trusts that he has not ordered for more than will be present. All this we, as members, rather take for granted and indeed if a secretary is a good secretary, we proceed to reelect him year after year, thus recognizing his worth and abilities.

Recognition through re-election is one form. A more appreciated form is a prompt response of the membership to his occasional requests for aid. When he sends a return postcard to ascertain if we will be present,—let us not forget to return it. When he calls for a payment of dues, let us recognize his sacrifice of time by not requiring him to send us a second, third, and even fourth statement. When he asks that

we aid in arranging the program, let us accept and do that much to help.

The county secretary gives generously and increasingly of his time in this day of perplexing problems that face medicine. We cannot compensate him by a salary, but at least we can recognize his service in little ways that perhaps will be even more appreciated.—The Wisconsin Medical Journal, July 1937.

THE MEDICAL AND THE MORTUARY PROFESSIONS

At a recent meeting of the National Selected Morticians, one of the topics for discussion was "Creating a Better Relationship Between the Medical and the Mortuary Professions." Two papers were given on the above subject, one by the mortician, Frank J. Peacock, Jr. of Milwaukee, Wisconsin and one by Dr. Carl W. Apfelbach, pathologist, of Presbyterian Hospital, Chicago, Illinois. The purpose of the discussion is implied by the title. The route of reaching that goal is a thorough presentation of the pros and cons of autopsy examinations from the standpoint of the mortician, the pathologist and the public which they serve.

Some of the most pertinent points that were brought out by Mr. Peacock are listed below.

"From the standpoint of the mortician, we are not exactly opposed to autopsies. We realize, on the basis of our professional training and our busniess experience, that such examinations are beneficial to the medical profession. We also believe that they have a potential value to the mortuary profession. We are opposed, however, to such examinations when we consider the past working agreements between the two professions have been rudely disregarded on the part of some selfish pathologists.

Has the medical profession ever realized that our reputation depends upon presenting a lifelike appearance of the deceased? Can they then wonder at our supposed lack of cooperation when pathologists present us with a distorted mass of flesh to reconstruct?

In considering the time element, it is frequent that the time elapsing between the death and the embalming alters a superior type of work. This is due to post-mortem changes. When physicians and hospitals insist upon obtaining autopsies and cause bodies to be held for a greater length of time, our embalming services are proportionately difficult.

The consideration of the second objection leads us to state truthfully that there are many unethical methods employed for obtaining autopsies. Frequently the family is interviewed and gives permission when the hospital clerk or the physician tells them that the autopsy consists of making a small incision no larger than the embalmer makes for the preparation of the body.

On the basis of various devices of consent, we insist that there should be the adoption of a standard form for autopsy permits.

The fifth and perhaps most potent objection on the part of the mortician is the difficulty experienced in embalming bodies which have been autopsied. Furthermore, it requires more fluids and materials, which are no small item of expense.

The morticians last objection is attributed to the fact that physicians fail to contribute information to the mortuary profession. If the post mortem examinations are so important. should we not receive scientific information? The modern mortician and embalmer is scientifically trained. We are interested in anatomical and pathological findings as they affect our work.

The physician is obligated to his patients. However, both the medical and mortuary professions have two common functions to perform, namely, the rendering of a humane and professional service, and the protection of the public health. If these functions are to be conscientiously performed there must be a cooperative spirit between the two professions. Without it the individual and combined achievement cannot be obtained. Such cooperation between the professions must be presented through three channels.

1. The medical profession must assume the

full responsibility of educating the public concerning the importance and advisability of autopsies.

- 2. A standard method of autopsy technic must be established whereby the existing ill feelings between certain members of each profession will be completely alleviated. Such a standard will enable the mortician to fulfill his obligation of protecting the public health by the proper preservation of autopsied bodies.
- 3. When the medical profession is willing to present important pathological and anatomical findings to the mortuary profession with respect to embalming, it is easy to see where the mortician would have more justification in departing from any feeling of neutrality. As such he could cooperate more fully when the occasion demands".

Dr. Apfelbach in his paper brought out the following important points from the standpoint of the medical profession.

"It is difficult to state in a few words the reactions of all classes of physicians and hospital authorities towards autopsies, but if we bear in mind some of the advantages that accrue when autopsies are done by a competent department of pathology, we may be in a position to evaluate the various attitudes of physicians and hospital authorities toward post-mortem examination.

The accuracy of clinical diagnosis is best determined by a post-mortem examination. The diagnostic skill of the physician is measured by this procedure. The hospital is protected against unscrupulous medical practices. The proper distribution of medico-legal cases occurs. Confirmation of new medical concepts can be made. The association of organic changes with clinical manifestations allows new interpretations of disease.

Surgeons need to know the gross appearance of diseased organs in order to properly interpret the diseases exposed during surgical operation, and their familiarity with such disease processes is enhanced by the opportunity of observing the organs at a post-mortem examination.

Part of the training of young physicians involves the study of disease as it is manifested in the body as a whole rather than in the individual organs.

It must be clear from these factors that the desire on the part of physicians and hospital authorities to secure post-mortem examination is a meritorious one, whereas it might be concluded, also, that the absence of such a desire might result from the lack of interest in medical science, a lack of appreciation of the value of autopies, the unavailability of an adequate pathological department, or the fear of allowing one's ability to be judged in public.

If it were true that physicians had reached a state of efficiency that would allow a correct diagnosis in each disease, one might maintain that autopsies would no longer be necessary. That Utopian wish, however, has not been filled. Even though our medical knowledge has grown abundantly during the last seventy years, we are still only scratching the surface of the hidden masses of medical secrets. It will take much effort and intelligent endeavor before physicians can diagnose and treat disease with the automatic certainty of mathematical deduction.

There are many avenues of approach to desired medical knowledge. Bacteriological studies yield some of the needed information. Animal experimentation is another source of uncovering biological phenomena. Chemical studies unfold the nature of materials with which we work and explain some of the interactions of these materials. Clinical observation elucidates the abnormal modes of reaction of diseased tissues during life and allows the association of symptoms into recognized entities.

Post-mortem examinations still are the means of finally confirming or disproving new medical concepts. The clinical interpretations must fit the organic changes. Material is obtained for histological, bacteriological and chemical studies. Much has been learned by statistical studies of large groups of autopsies on diseases in which preponderance of occurrence at cer-

tain ages, in the sexes, in racial groups or communities is important.

To sum up the attitude of some physicians toward morticians, we believe that an unnecessary and unreasonable obstacle is placed in the path of advancement of medical science by morticians who influence lay people against granting permission for post-mortem examinations. We believe thoroughly that at the present time there is a disproportion in values placed on autopsies by the two professions. Physicians will always be out of sympathy with the attitude of morticians as long as they try to dictate what the attitude of physicians should be toward such examinations.

Pre-autopsy embalming of bodies is being discussed rather extensively now as a solution to the difficulties under consideration today. Unfortunately this alternative meets with the approval of the mortician but not with the majority of the pathologists. It is true that some pathologists have stated that pre-autopsy embalming is satisfactory. I wish to point out, though, that it is inconsistent with the most skillful methods of performing postmortem examinations. The objections to embalmed bodies from the viewpoint of pathologists may be classified as follows:

- 1. Bacteriological and chemical studies are interfered with.
 - 2. Colors are obliterated.
 - 3. Odors are interfered with.
 - 4. The consistency of organs is changed.
- 5. Histological studies are less effectual because of the improper preservation of all organs.

It is encumbent, however, on hospitals to conduct a pathological service that can do postmortem examinations immediately on receiving permission. If the hospital is unwilling to agree to this, then, of course, it must also agree to pre-autopsy embalming in order to prevent development of post-mortem changes and settling of blood."

Obviously we must all realize that we as physicians have a viewpoint of post-mortem examinations that we cannot expect the mortician to share. To the medical profession it

is the means of making a trial balance between the interpretation of physical signs and symptoms that any patient may have, and the efficacy of the therepuetic measures which were employed. To the mortician, post-mortem examination can only be interpreted to mean a favor to the attending physician, the hospital, his clientele, and whatever personal value he may derive from the advancement of medical science.

Since the medical profession is to reap the main benefits from increased frequency of postmortem examination, should not we, as practitioners and members of varying medical associations, bear the brunt of the education of the public as to the value of post-mortem examinations, as well as to go out of our way to cooperate with the mortuary profession in accomplishing this goal.

LABORATORY

Edited by J. L. Lattimore, M.D.

LABORATORY CONTROL IN THE USE OF SULFANILAMIDE (PRONTOSIL)

J. L. LATTIMORE, M.D.

Topeka, Kansas.

Considerable data has been accumulated, both experimental and clinical on the use of sulfanilamide in the treatment of various coccal infections. At present it appears to have its greatest value in the treatment of hemolytic streptococci, however various reports have been published stating that the drug has definite theraputic beneficial effect upon pneumococcal, meningococcal and gonococcal infections. In 1915, Foerster claimed good results from the drug in staphylococcal infections, since then various claims have been made for its value in typhoid, para-typhoid, urinary and dysentery infections.

With the wide use of the drug, there will be a tendency not to consider many important factors, such as toxicity, individual susceptibility, contraindictions, ample dosage, proper diagnosis and mode of action of the drug.

The drug has a rather low toxicity, no fatalities having been reported to date. It does produce a moderate cyanosis, a mild depressing effect and a low grade fever. The drug is distributed thruout the body and is found in all fluids, including the urine, gastric contents, bile, pancreatic juice as well as the blood.

Individual susceptibility has not been described in the literature so far as I know. Experience with other drugs within the past few years will at least serve to warn us against the indiscriminate use.

The main contraindiction in the use of sulfanilamide is nephritis. Certainly in grave infections, one at times disregards complications. As a rule however, the patient should be checked for possible nephritic changes, the blood urea being the first of the nitrogenous waste products to be retained, would indicate that the blood urea should be a routine in all cases that are to use sulfanilamide.

Acidosis is another complicating factor. A check on the carbon-dioxide combining power of the blood should also be a routine. A combining power of less than forty-five volumes per cent, should first have the acidosis corrected. As a routine, most physicians administer sodium bicarbonate with each dose of sulfanilamide. One of the complicating conditions observed in some cases is a rash, identical in appearance to measles. This rash appears about the ninth to tenth day and disappears within about thirty-six hours.

Ample dosage of the drug appears to be of vital importance. As a rule, the average size individual will require about sixty grains as an initial dose to obtain a blood level of ten to fifteen mgm. The only way that this can be controlled is by blood¹ sulfanilamide determination. The test is not especially complicated but fresh solutions are essential. In children the usual dosage is about half that for the adult. Probably the drug deteriorates upon standing for several months, accounting at times for failure of obtaining the desired blood level.

Certainly, no drug has been developed within the past few years, unless it is insulin, that requires a closer laboratory control than the use of sulfanilamide. First and of great importance, is the correct bacteriological diagnosis. As a routine, I have found brain-broth to be the most satisfactory media for blood culturing. Some streptococci grow rather slow, all cultures should be carried for at least three weeks. It is also important to make repeated blood cultures

in those cases that give negative results. Upon completion of the use of the drug, blood cultures should be made for seven consecutive days.

SUMMARY, LABORATORY AID

Correct bacteriological diagnosis.
Control of acidosis with CO 2 determinations.

Determination of nephritis. Control of blood sulfanilamide.

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TUBERCULOSIS ABSTRACTS

A review for physicians prepared monthly by the National Tuberculosis Association and published through the co-operation of the Kansas Tuberculosis and Health Association and The Kansas Medical Society.

RECENT TUBERCULOSIS FIGURES

The decline in the death rate from tuberculosis from 200 per 100,000 in 1900 to fiftythree per 100,000 in 1935 indicates a public health achievement with which the people of this country should be fully acquainted. At the same time it should be pointed out to them that there are still 70,000 deaths from this disease annually: that it is the leading cause of death between the ages of fifteen and fortyfive, economically and biologically the most productive years of life, and that tuberculosis is an infectious, and therefore a preventable, disease. With these facts clearly in mind the public will not rest content with what has been accomplished. A death rate of fifty provides no final objective. Why not forty, or thirty, or twenty, or, even better, complete eradication of the disease? There is no reason to believe that these ends are unattainable, but this will depend on the intensification of the present methods of control.

While stressing the gravity of high mortality among young people the fact must be faced that old age, too, makes its serious contribution. For instance, the death rate for seventy-five years and over was 106 per hundred thousand in 1934, while that for the group twenty-five to thirty-four was only seventy-nine. In other words, for every thousand old people there are more deaths from tuberculosis than in any thousand young people. Consider the menace of these old chronic cases, living often as they

do as unrecognized spreaders of infection in the families of their children and grandchildren. An x-ray study of this group might yield productive leads in a preventive campaign.

Again at the other end of life's span we still face a shocking tuberculosis death rate among infants under one year of age, nearly forty per cent of the deaths being from tuberculosis meningitis. Here is ample evidence of poor work in the field of breaking contacts.

Ten years or more ago statistical studies brought out the fact that the death rate from tuberculosis among young women was well over fifty per cent higher than that among young men. There is evidence that the wide publicity and alarm created by this discovery has had its effect for at the moment there is a definite indication that the existing ratio to the disadvantage of the young women is distinctly less. One might interpret this as statistical proof of the value of publicity in health education.

In a recent study of death rates by occupation, the employed men were divided into groups according to social and economic status. figures show that for the highest economic group, including lawyers, physicians, surgeons, etc., the death rate from tuberculosis was only twenty-six and two tenths, while the rate considerably increased through the other groups, such as clerks, agricultural workers, reaching the very high figures of 184.9 for the unskilled group. Also, the same study showed that while the tuberculosis death rate in the general population was seventy-one per 100,000 in 1930. the tuberculosis rate for men fifteen to sixtyfour years of age gainfully employed was eightyseven per 100,000, being twenty-three per cent higher than the average. All these facts point to the necessity for some strenuous efforts to be put into the field of industry.

While the tuberculosis rate among the colored is three and one-half times that of the whites, their rate likewise is declining, dropping sixty-five per cent from 1910 to 1934. The white rate in the same period declined seventy per cent. We have only begun to supply any kind of special sanatorium or clinic care for negroes. As they constitute eleven per cent of our United States population, it is vital to control the high rate among them if we hope to eliminate tuberculosis.

With the general decline in the tuberculosis rate there have been corresponding declines at all ages and in both sexes. The declines, however, have not been uniform. In childhood (up to

fifteen years of age) have occurred the greatest decreases, while the rates for the middle-aged group and the aged have not declined as fast. The rate for young men has declined faster than that for young women.

Of equal interest with the statistical study of mortality rates is that of the declining rate of morbidity from tuberculosis. Many years ago von Pirquet, in Vienna, and more recently Hetherington, in Philadelphia, reported seventy to ninety per cent of infection with tuberculosis among the general population. While true for the situation in Vienna at the time of von Pirquet's report and of a group in Philadelphia living under unfavorable conditions, the figures do not represent truly the general infection rate for the United States today. The MA-100 study carried out by the National Tuberculosis Association from 1932 to 1934 included 12,-000 individuals in widely scattered urban and rural areas and, covering ages from one to twenty and over, gave an average twenty-six per cent of infected persons in the population studied. The range was from nineteen per cent of those under one year of age to forty-six per cent of those aged twenty and over. Further tests are under way with P.P.D. and the tabulation of 40,000 cases similarly studied will soon be available for comparison with the MA-100 list. It is doubtful that the results will show an adult rate of infection running over fifty per cent.

A striking statistical study in the tuberculosis field is the increase of beds for the tuberculous. In the Journal of the American Medical Association for December 7, 1935, is the report of a sanatorium survey which gives the number of beds for the tuberculous as 95,198. Of these nearly 15,000, or fifteen per cent, were located in general hospitals, an interesting observation and one that may have its ultimate influence on sanatoria used exclusively for tuberculous patients.

A further trend in this direction is evidenced in a study made in 1935 which showed that in the state of Wisconsin eighteen per cent of the tuberculosis deaths occurred in general hospitals. Undoubtedly the modern methods of surgical treatment of the tuberculous have brought about this change.

In 1933, Dr. Bruce Douglas, chairman of the Committee on Treatment, reported that of 29,211 patients in 112 institutions of 100 or more beds, thirty-nine per cent had received or were receiving some form of collapse therapy. In six institutions over seventy per cent of the

patients had been or were being treated by collapse therapy. According to the study of the American Medical Association, a total of 406 sanatoria and 101 of the principal tuberculosis departments of general hospitals are equipped with facilities for pneumothorax and administer over 500,000 treatments yearly.

Statistics regarding the staggering investments in institutions for the care of the tuber-culous and the annual cost of their maintenance present cogent argument for intensifying the preventive aspects of tuberculosis work. The valuation of the institutions themselves runs over \$329,000,000 and the annual cost of maintaining them amounts to \$76,000,000.

Of all statistical studies into the mortality and morbidity from tuberculosis none is more interesting than that of geographical distribution. Granting the well-known fact that urban rates exceed those of rural areas it is still somewhat of a mystery why some states show such an amazingly low mortality. For instance, Wyoming has the lowest rate for 1934, a mere eighteen and five tenths per 100,000; Nebraska and Utah have rates of twenty-one plus; Iowa and North Dakota, rates of twenty-five. All in all there were thirteen states with tuberculosis rates less than forty per 100,000 in 1934 including Oregon, Maine, Minnesota and New Hampshire.

Dr. Dauer, of Tulane University, by constructing a map showing death rates from tuberculosis by counties, has demonstrated a series of endemic areas of tuberculosis, which follow no artificial state boundry lines. Dr. Dauer is extending this study to cover the whole United States and the results of it will be of extreme interest.

It may be advisable to put intensive efforts on such highly infected areas rather than to attempt to cover whole states in which large areas are almost devoid of tuberculosis.

A Resume of Recent Tuberculosis Figures. Jessamine S. Whitney, Statistician, National Tuberculosis Association, 50 West 50 Street, New York, N. Y.

For the first time in any international exposition, a separate building has been assigned by the New York World's Fair of 1939 for the presentation of the story of medicine and public health. This building will be divided into three main chambers of great size, to be designated as The Hall of Man, The Hall of Medical Science and The Hall of Public Health. The General Advisory Committee, which is planning the exhibits for this building, is headed by Victor Heiser, M.D., of New York City.

MEDICAL ECONOMICS

Edited by O. W. Davidson, M.D. of the Medical Economics Committee

BUSHIDO

Those of you, my readers, who are familiar with the Japanese people, know the meaning of Bushido. But yet, for the sake of others who may not know, or may have forgotten, permit me to briefly explain that Bushido implies the ethics which govern the Japanese people. In its precepts, captious criticisms have no justification. Nor is there any place wherein a caviling spirit may, with honor, be indulged. Circumspect behavior must be made the prerequisite of every human incentive.

It is quite likely that I would have remained in ignorance of its meaning had it not been for my becoming a member of the surgical staff of the Japanese Hospital here in Honolulu; and being the only Causacian on the staff, my position was, for a brief period, strangely unique. I felt a subtle incongruity between myself and the environment to which I had. with deep appreciation, become heir. That I experienced being at ease I cannot pretend to say, for the phobia of committing some indiscretion clung to me most tenaciously. This phobia, more than likely, was the manifestation of that awkwardness which a strange or foreign environment is so likely to impose. But there followed something more puzzling than the feeling of awkwardness. Japanese physicians never criticize or belittle the work of others. They are past masters when it comes to fair dealing with their confreres.

There is a politeness among all Japanese people that commands respect, but there is a politeness among the members of their medical profession that is really charming. Indeed, it is so ingratiating that one is immediately at ease at coming into its presence. An ease that lends such a self-approbation as to render one susceptible to a behavior heretofore quite distant to him. When among my Japanese confreres or patients a politeness comes to me that really gives poise to the least I might say or do and while I am mindful of its being a reflection of my new environment, and that its full measure may never be given room in a mind where strong likes and dislikes are inhabitants, nevertheless it was not without its impressive lesson and its solemn admonishments.

Strange scenes and environments arouse our curiosity. My earlier impression of this Japanese behavior begot, in my mind, the notion that it was all assumed. When several years' contact with it showed no change, I was, in all fairness, compelled to abandon such a notion. Nor could I escape the feeling of a keen remorse, for I had come to learn the unjustness of my thoughts. Politeness and honor are innate to the Japanese mind. There can be no question on that score. But what was it that had made such a beautiful custom innate? Becoming curious, I asked one of my Japanese confreres to tell me where, when and how this most unusual spirit of fraternity had its beginning. He could give to me but one answer. An answer in a single word—Bushido!

Bushido is not a written code. At its best it is but the traditional custom that governs what is felt to be the right way of living. It permeates all classes and into all human endeavor. Its glory is universal, and its justice touches with that full recognition of the exigent needs of life's inevitable emergencies. But its universal application cannot be discussed here save by inference. We, my readers, are, for the present at least, but interested in Bushido as it affects the practice of medicine. From infancy, this philosophy has been breathed into the utmost depths of the heart and soul of this people. This is particularly true of those whose class permits the entering of a profession.

Within a hospital where the spirit of Bushido prevails the paramount interest is the patients. This interest is not influenced by class distinction or position. The hospital management, the medical and nursing staffs, in fact all having to do with the hospital breathe the atmosphere of cooperation. An attitude of impatience toward a sick person is never observed in such an institution. While a surgeon is operating, the operating room maintains an air of solemnity that would do credit to a place of Divine worship. Nor is the least levity indulged, or a word uttered that is irrelevant to the interest of the patient on the table.

There is an unconscionable dignity that comes to one when caring for a Japanese patient that is traceable to the homage and respect with which he honors his doctor. I need not remind you, my readers, especially those of you who know me intimately, how foreign all this seemed to me. And was it any wonder that I should feel surprised when I discovered myself indulging a politeness that seemed to have, fairylike, or mysteriously, taken a sudden pos-

session of me. And then when several years had passed and I found no change in this exalting attitude of fraternity, was it not natural that I become keenly interested in the Bushido that gave it its existence?

Bushido is the soul of Japan. Likewise it is the soul of its medical profession.

In 1908 Inazo Nitobe, a Japanese scholar, published a little book which he made free to entitle Bushido. Insofar as I have been able to ascertain, it is the only work of its kind. While the author is careful to create the impression that Bushido is not easily explained in words, and that he is trying to define something that can best be defined in acts and deeds, his treatise of the subject lends such clearness of this that the reader is aware that he has much to read between the lines.

No retracing seems capable of enabling a student of Japanese history to discover just when and where it was that Bushido first began its influence. But one cannot escape the impression that Japan had a civilization antedating that which has been credited by historians in general. That moral training belongs to the home is a tradition that seems to be as old as the race itself. In his preface Nitobe relates an experience with the late M. de Laveleye. He says, "About ten years ago, while spending a few days under the hospitable roof of the distinguished Belgian jurist, our conversation turned, during one of our rambles, to the subject of religion. 'Do you mean to say,' asked this venerable professor, 'that you have no religious instruction in your schools?" question stunned Nitobe for a time and he admits being unable to think of a ready answer. He was conscious, however, of what the answer should be, but recalling that the precepts of morality with which his childhood had become enamored having been gotten from a home and parent exemplification, gave to him the feeling that anything approaching a direct answer would necessarily be clumsy.

Bushido not only insists on doing the right thing, but adds to the doing the necessity of doing it at the right time, for it admonishes,— "Doing the right thing at the right time will never fail to furnish calm trust in Fate, and a quiet submission to the inevitable."

Bushido dwells deep in the minds of all thinking men. All physicians are credited as being thinking men. To this is added a philosophy that would be hard to gainsay. It is this:

"The best efforts of thinking men can be reached only through meditation, for meditation is the only means to zones of thought beyond the range of verbal expression." This philosophy makes a consultation with a Japanese confrere a delight. To be an able practitioner of medicine will require courage. Courage is doing what is right. To boast of one's acts of benevolence, even to make mention of them, is a flagrant violation of Bushido. Nor could one's acts of charity be flaunted to justify the imposing of an exorbitant fee. Bushido makes of one's acts of charity a part of his private life. To discuss any part of one's private life is necessarily vulgar. Yet, charity or benevolence should never be indulged by impulse. It should never be indulged beyond measure for when it is it sinks into weakness. The tenderness of a warrior is not a betraval of weakness. It is the manifestation of his sense of justice. For in tenderness the warrior is able to display that chivalry which justice must ever demand.

Bushido differentiates between an acquired politeness and that of an intrinsic excellence; for it is, according to its precepts, a poor virtue when actuated only by fear of offending good taste. But when politeness is innate, it flows ever gently and kindly around and through that delicate and sensitive structure referred to as human feelings. Therefore, politeness is not of an intrinsic excellence unless it imparts this grace to manners. With this, its origin is ever in motives of benevolence and modesty, then, actuated by tenderness toward the sensibilities of others, it can endure only as a graceful expression of sympathy.

It then goes on to point out how quickly deception would rob politeness of its charm and power. "Unless," it explains, "that is veracity and truthfulness, politeness is a farce and a show."

It is in every man's mind to covet honor; but little doth he dream that what is truly honorable lies within himself and not anywhere else. Such honors as men assume to confer are not real. Honor being even within cannot be transferred. Aside from this it must not be forgotten that such a power, assumed for the conferring of something that cannot be conferred, can just as easily be assumed to make mean. But the honor that grows in your heart abideth till death. May even haunt your name in the memory of the world.

It holds then, that loyalty to all these precepts means loyalty to one's every obligation and duty. And to know just what these obligations and duties are requires no search outside of one's own heart and conscience.

How strange all this will seem to one who, like myself, knew of no professional ethics beyond those that had been imposed by assumption? A code that never had prevented unjust and unwarranted criticisms. And when years had proved its impotency, and begot the notion that a true fraternalism could never obtain among medical men, was it not surprising to discover that such a fraternity did really exist? Nor is that all. The absurdity of our unwillingness to eliminate selfish impulses is brought to the fore in the revelation of what we have lost by this voluntary deserting the very best there is in us? The very bulwark of the finest there is in us.

There is something beautifying in the assurance of having the respect and good will of one's confreres. There is a great encouragement in knowing your competitors are in sympathy with you when trials beset your path. There is something to edify in knowing, and without question, that the attitude of a competitor toward you is the same whether or not you are present. And to know deep in your heart that he will never utter a word that could reflect the least dicredit, even on the most careless of your acts.

Nitobe says, and I can think of no ending to this more befitting.—"Bushido is not a written code of thics. But if it were, and should, by humanity's inevitable restlessness be made to vanish, its power could not perish. Schools of material prowess or civic honor can be demolished, but the light and glory of Bushido will long survive their ruins. Like its symbolic flower, after it is blown to the four winds, it will still bless mankind with the perfume with which it will enrich his life. Ages after, when its customaries shall have been buried and its very name forgotten, its fragrance will come floating in the air as from a far-off unseen hill, —the wayside gaze beyond;"—then in the beautiful language of the Quaker poet,—

"The traveler owns the grateful sense Of sweetness near, he knows not whence and pausing, takes with forehead bare the benediction of the air."

—J. Christopher O'Day, M.D., Honolulu, Hawaii, in the Western Hospital News.

NEWS NOTES

NEW OFFICERS

At an election of officers recently held by the State Board of Medical Registration and Examination, Dr. O. S. Rich of Wichita was elected president, and Dr. J. F. Hassig, of Kansas City, secretary-treasurer. Both officers will serve fo a two year term. Dr. C. H. Ewing of Larned, former secretary, who is no longer a member of the Board, has transferred all records to the new secretary and thus all matters pertaining to medical registration should be addressed to Dr. J. F. Hassig, 804 Huron Building, Kansas City, Kansas.

Present members of the Kansas Board of Medical Registration and Examination are as follows: O. S. Rich, M.D.; J. F. Hassig, M.D.; H. E. Haskins, M.D., Kingman; J. E. Henshall, M.D., Osborne; M. C. Ruble, M.D., Parsons; F. S. Hawes, M.D., Russell.

MEDICAL ECONOMICS COMMITTEE MEETING

A meeting of the Committee on Medical Economics was held in Abilene on July 18. Members present were as follows: Dr. J. F. Gsell, Wichita: Dr. H. L. Chambers, Lawrence; Dr. Ivan Burket, Ashland; Dr. T. C. Kimble, Miltonvale; Dr. R. T. Nichols, Hiawatha; Dr. Geo. O. Speirs, Spearville; Dr. N. E. Melencamp, Dodge City; Dr. L. V. Dawson, Ottawa; Dr. A. C. Armitage, Kinsley; Dr. Arthur S. Anderson, Lawrence; Dr. J. M. Mott, Lawrence; Dr. F. L. Loveland, Topeka; Dr. W. N. Mundell, Hutchinson; Dr. L. S. Nelson, Salina; Dr. Barrett A. Nelson, Manhattan; and Dr. Geo. A. Chickering, Hutchinson. Mr John F. Austin, Wichita. Executive Secretary of Sedgwick County Medical Society, and Mr. Clarence G. Munns, Topeka, Executive Secretary of The Society, were also present.

Foremost actions of the meeting were as follows:

- 1. Decision that the Society would prepare and issue a resolution on the subject of socialized medicine.
- 2. Detailed discussion of medical problems involved in the assistance features of the Social Security Act and preparation of plans wherein the Society will assist the Kansas Social Welfare Board in this connection.

INDIGENT CARE

As was reported in the June issue of the Journal the Kansas Social Welfare Act contains the following provision which it is believed will be of assistance in developing satisfactory indigent medical plans throughout the state:

Section 8 (s) The state board shall in cooperation with county officials develop plans financed by county funds for providing medical care for needy persons.

Representatives of the Society are now conferring with the Social Welfare Board in this interest and it is probable that the Board will issue official recommendations on this subject within the near future.

POSTGRADUATE COURSES

The third postgraduate course on obstetrics and pediatrics sponsored by the Kansas State Board of Health and the Society and financed through funds available under the Social Security Act commenced in northeast Kansas on August 9.

The course will consist of a series of correlated discussions on new developments in the fields of maternal and child welfare. Speakers for the event are Dr. L. A. Calkins, professor of obstetrics, and Dr. Frank C. Neff, professor of pediatrics, both of the University of Kansas School of Medicine. The schedule of meetings is as follows:

	First Series (Same Lectures)	Second Series (Same Lectures)	Third Series (Same Lectures)	Fourth Series (Same Lectures)
Topeka (Hotel Jayhawk)	Aug. 9	Aug. 16	Aug. 23	Aug. 30
Manhattan (Wareham Hotel)	Aug. 10	Aug. 17	Aug. 24	Aug. 31
Marysville (Hotel Pacific)	Aug. 11	Aug. 18	Aug. 25	Sept. 1
Hiawatha (Shrine Club)	Aug. 12	Aug. 19	Aug. 26	Sept. 2
Atchison (Whitelaw Hotel)	Aug. 13	Aug. 20	Aug. 27	Sept. 3
Hours of meeting:	4:00 p. m.	to 7:00 p. to 10:00 p.		

Atchison County Medical Society, Brown County Medical Society, Marshall County Medical Society, Riley County Medical Society and Shawnee County Medical Society are serving as hosts for the meetings in their counties.

The course is open without enrollment fee to all registered doctors of medicine.

STATE BOARD OF HEALTH

Governor Walter Huxman announced recently the appointment of Dr. R. T. Nichols, of Hiawatha, Councilor of the First District of The Society, as a member of the Kansas State Board of Health.

Dr. Nichols replaces Dr. C. W. Robinson, of Atchison, who resigned his position on the Board by reason of ill health.

NEW APPOINTMENTS

Dr. J. F. Gsell announced recently the appointment of Dr. R. L. Gench, of Fort Scott, and Dr. C. D. Bell, of Pittsburg, as additional members of the Committee on Tuberculosis.

Dr. Gsell also recently announced the appointment of Dr. C. W. Walker, of Eskridge, as Chairman of the Necrology Committee.

NEW SOCIETY

The Council has received an application from the physicians of Barber County to charter a county medical society in that county.

It is planned that the society will operate primarily for business and economic purposes and that its members will retain associate memberships with adjoining counties for attendance at scientific meetings.

STATE OPHTHALMOLOGIST

Mr. R. B. Church, Director of Kansas Social Welfare, announced on August 4 the appointment of Dr. C. J. Mullen of Kansas City, Kansas, as State Ophthalmologist for the Kansas Social Welfare Board.

This office, which is required by the Federal Social Welfare Board, will be part time and will consist mainly of administrative activities in the handling of blind assistance under the Social Security Act.

Dr. Mullen is a graduate of Creighton University School of Medicine, has practiced in Kansas City since 1930, and has served several terms as secretary of Wyandotte County Medical Society. He is also a member of the American Board of Ophthalmology.

UNEMPLOYMENT COMPENSATION

The major elements of the Kansas Unemployment Compensation Act are that any employer of eight or more persons, except religious, educational, charitable and scientific concerns, shall contribute payments to the state unemployment compensation fund.

This obviously does not affect many physicians inasmuch as they do not ordinarily employ that number of persons, but it does affect a considerable number of hospitals. Hence to provide guidance for hospitals in this matter, the Kansas Unemployment Compensation Division recently held a meeting in Topeka which was attended by representatives of various hospitals of the state. Regulations approved at this hearing are as follows:

- 1. That officers, trustees, internes, nurses, student nurses, dieticians, technicians, janitors, etcetera, are considered to be employees of a hospital for determination of the number employed.
- 2. That medical staff members are not considered to be employees unless they serve for a salary or other compensation or are otherwise engaged in a direct employment relationship.
- 3. That any hospital with less than eight employees is not in any way affected by the act.
- 4. That hospitals with eight or more employees are affected by the act unless they can show definitely that they are non-profit organizations and that they are operated exclusively for religious, educational and scientific purposes.
- 5. That the following rule shall be utilized to determine whether or not a particular hospital with eight or more employed is an exempt organization: "Hospitals incorporated for benevolent purposes without capital stock that never declare or pay dividends; that use all of their earnings and income from whatever source in caring for persons sick and injured and in the maintenance, extension and improvement of the hospital; that admit patients without regard to race, creed, or wealth are exempt from the provisions of the Kansas Unemployment Compensation law as corporations organized and operated exclusively for charitable purposes, no part of the net earnings of which inures to the benefit of any private shareholder or individual."

It will be noted that the latter rule contains certain detailed requirements which must be followed without exception by a hospital if it desires to claim exemption as a non-profit institution. In the event there is any doubt concerning compliance with these regulations, hospitals should communicate with the Kansas Unemployment Division, 610 National Bank of Topeka Building, Topeka, in order to secure special instructions.

The Division has requested that this information be called to the attention of every Kansas physician in order that, as trustees and staff members of hospitals, they may assist in seeing that the law is accurately followed.

CULTS

Several recent developments pertaining to the practice of medicine and surgery by cultists are as follows:

Through excellent cooperation extended by Mr. Arthur J. Stanley, Jr., County Attorney of Wyandotte County, and his assistant, Mr. T. P. Palmer, an alleged unlicensed practitioner, A. L. Ballentyne of Kansas City, was enjoined on July 12 from further practice of medicine and surgery in Kansas. The following order was issued in the case, which is of unusual interest by reason that it is the first completed action under the medical injunction law:

IN THE DISTRICT COURT OF WYANDOTTE COUNTY, KANSAS.

No. 53752.

State of Kansas, Plaintiff,

VS.

A. L. Ballentyne, Defendant.
ORDER AND JOURNAL ENTRY.

Now on this 12th day of July, 1937, the above entitled cause comes on for hearing upon a petition for an injunction herein and after hearing the evidence adduced in support thereof, the Court finds that such injunction should be granted and become effective upon the signing of this order and journal entry.

It Is Therefore Ordered, Adjudged and Decreed, that the injunction as prayed for in the petition in the above entitled cause, is hereby granted, and the said defendant A. L. Ballentyne, is hereby permanently enjoined from practicing medicine in the State of Kansas.

Harvey J. Emerson, Judge 3rd Division.

Mr. C. L. Clark. County Attorney of Saline County, is completing arrangements to try the injunction case now pending against C. D. Wray, tuberculosis specialist of Salina. The hearing thereon is expected to be held during August. Wray's attorneys have stated that they would probably offer no defense.

Judge Richard L. Hopkins, of the Federal District Court, issued the following temporary restraining order in the osteopathic narcotic case on June 29:

IN THE DISTRICT COURT OF THE UNITED STATES

FOR THE DISTRICT OF KANSAS No. 979-N

The Kansas State Osteopathic Association, Incorporated, et al., Plaintiffs, vs.

H. D. Baker, etc., Defendant.

ORDER OF TEMPORARY INJUNCTION Now, on this 29th day of June 1937, the above entitled suit comes regularly on for further consideration upon the motion of the plaintiffs for a temporary injunction, and the plaintiffs appearing by their attorneys, W. H. Vernon and Frank H. McFarland and the defendant appearing by Summerfield S. Alexander, United States District Attorney, and the parties announce themselves ready and the matter is submitted to the court.

And after oral argument of counsel for the respective parties, the court, being first fully advised in the premises, finds that a temporary injunction should issue in this suit for the purpose of maintaining the status quo.

It Is Therefore, Ordered Adjudged and Decreed:

That the defendant, H. D. Baker, as Collector of Internal Revenue of the United States of America in the State of Kansas, his subordinate officials, servants and agents, be and they are hereby enjoined and restrained from refusing to renew, reissue or issue licenses or stamps for narcotic drugs under the Act of Congress commonly known as the Harrison Narcotic Act, the same being 26 U.S.C.A. 1040 to 1054 and 1383 to 1390, to duly licensed osteopathic physicians under the laws of the State of Kansas because of the claim or contention that said osteopathis physicians are not entitled to said narcotic licenses or stamps under the laws of the State of Kansas; that this order shall remain in effect until the further order of this court; and it is further ordered and decreed that jurisdiction be and it is hereby retained in this matter to cancel or recall all licenses or stamps issued to said osteopathic physicians subsequent to the date of this order if on the final determination of this suit or upon the final determination of the action now pending before the Supreme Court of the State of Kansas, it should be determined that said osteopathic physicians are not entitled and qualified under the laws of the State of Kansas to receive said narcotic licenses or stamps.

The defendant in open court objects to the order of the temporary injunction as presented and drawn, for the reason that the application for temporary injunction is not verified and no evidence has been offered thereon; nothing has been admitted except that the osteopathic physicians in Kansas have heretofore for many years been registered; that the plaintiff corporation cannot maintain this action; that the plaintiff trustees of the plaintiff corporation cannot maintain this action; that the plaintiff individuals cannot maintain this action either collectively or as a class unit; that this court is without jurisdiction to order the Internal Revenue Coldectors to register all osteopathic physicians of the State of Kansas under the narcotic laws and to issue permits to them; that this court is without power to cancel the registration and permits issued to the osteopaths in this state who are not before the court.

All of which objections of the defendant are by the court overruled and to which such ruling the defendant in open court duly objected and excepted, and his exceptions are allowed.

It is further ordered, adjudged and decreed that a duly certified copy of this order be served forthwith upon defendant, H. D. Baker, as Collector of Internal Revenue of the United States of America in the State of Kansas.

Judge of the United States District Court.

It is interesting to note that the osteopaths overlooked joining the Federal Narcotic Division in this action and that, by reason of this oversight, the Division is refusing to approve their applications. A date for final hearing of the case has not as yet been set.

The Kansas State Osteopathic Association has to date refused to file an answer in the Riley County case pending against osteopath Gus V. Salley, despite the fact that the answer date has expired. County Attorney Scott Pfeutze has notified their attorneys that they must either answer or accept a default in the case.

The case against B. L. Gleason, osteopath of Larned, is still pending in the Kansas Supreme Court and a hearing thereon is anticipated during the next term of that Court in October.

The injunction case pending against W. W. Cooper, cancer specialist of Altoona, is expected to be heard during the first part of September. Cooper apparently has no legal defense for his actions inasmuch as he openly utilizes medicines without a license.

The following bulletin recently received by the central office is of interest in this connection.

Pittsburg, Kansas, July 30, 1937.

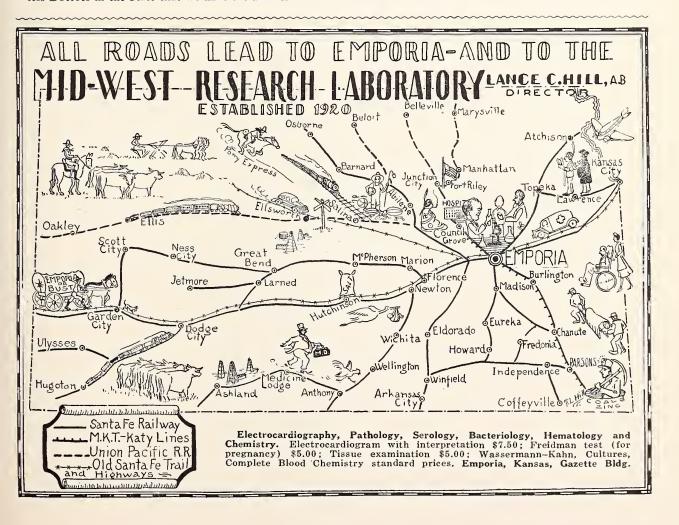
To the Drugless Profession Of the State of Kansas

Greetings:

We are sending a copy of this letter to all Drugless Doctors in the State that we have the address of. For the benefit of you who are unacquainted with the W. W. Cooper case in question, will explain—He removes or "kills" cancer. (He really does kill cancer.) He is 86, old and feeble—lives at Altoona and has been arrested under the new basic science law, for "practicing medicine without a license." The case is to be tried before Judge Cooper, Fredonia, Kansas, at next term of Court. It was to have been tried last term but some of the Drugless people got busy and had it continued so we would have time to prepare a defense.

Now we realize if Dr. Cooper looses this case our turn will be next. Every drugless doctor in Kansas will have to fight a like case and if a precedence is set by the loss of this case then we will be strangled, all of us out of business. Remember Okla. only one D. O. passed the board, and about the same of D. C.'s they have the basic law in Okla.

Many of the profession requested that Dr. E. M. Perdue, E. 32nd. St. Kansas City, Mo. be retained in the case because of his success in his own case and many others—one case at least he fought through the U. S. Supreme Court and won. Dr. Perdue's wide experience and his reputation of never loosing a case assures us of making no mistake in selecting him. As Dr. Cooper requested that we take charge of the case, employing lawyer that we thought best; we interviewed Dr. Perdue



the 26th. inst. He consented to take the case if we can raise the fee. We also think that C. C. Mc-Cullough of Emporia should be employed also as this is a case requiring much work and care to win. Mr. McCullough, we think, will not charge a large fee—if he did it will pay us to pay it. Dr. Perdue is an elderly man Mr. Mc is younger and a real fighter, to my mind that is what we need to win.

We must have funds. Five or six hundred dollars must be raised at ONCE. The lawyers say there is much to be done to be ready for the trial under the new law and that we must not go to trial "half hammered". So far we have several pledges but not a dime in money, we have paid our own expenses and given our time and we are willing to give more money and time. (We fully realize that TIME is all we will have if this case is lost.) Ten to \$25.00 from the Chiro's alone will start the "ball rolling" I am sure that even outsiders will donate. Also all drugless people of the State will donate to this fund. Please remit at once-its not a donation but an investment- To Dr. V. J. ROWE, 110 E. Adams, Pittsburg, Kans. Will give full account at trial and send you receipt for same. Thank you.

We must fight and fight NOW and WIN or lose ALL.

Dr. W. E. Rowe, D. C. & N. D.

P.S. This is urgent. Send all you can NOW. Please do not delay. See other drugless people of your City, ask them to help. Ask your patients to help.

W. E. R.

COUNTY SOCIETIES

There were thirty-eight physicians in attendance at the annual golf tournament and banquet of the Cowley County Medical Society held in Arkansas City on June 24. The afternoon was devoted to the golf tournament. Dr. Cecil Snyder of Winfield, was low medalist, with Dr. Charles T. Moran and Dr. G. O. Giffin of Arkansas City tying for low net score.

At the banquet held that night guest of honor was Dr. H. L. Snyder, of Winfield, who was presented with a plaque in token of his services as president of The Kansas Medical Society last year. Dr. K. Armand Fischer, of Arkansas City, presided as toastmaster. Other speakers were: Dr. H. L. Snyder, Winfield; Dr. J. F. Gsell, Wichita; Clarence G. Munns, Topeka; Senator Kirk W. Dale and Representative George Templer, both of Arkansas City; and Representative S. C. Bloss, of Winfield.

The members of the Douglas County Medical Society met for a ladies night dinner at the Lawrence Country Club on August 5. Subject of the program was "Hair"; Sudden Blanching Of, Dr. George W. Davis, Ottawa; Complete Loss Of, Dr. A. J. Anderson, Lawrence; Regeneration Color Of, Dr. H. L. Chambers, Lawrence.

The Marion County Medical Society met for an annual dutch lunch at the Marion Country Club on June 16. A business meeting followed the luncheon, with Dr. Theodore J. Thomas, of Florence, being elected to membership. Dr. Thomas has recently returned from Portugese East Africa where he served for four years as a medical missionary.

Speakers at a dinner meeting of the Northwest Kansas Medical Society held July 27 in Colby were Dr. William C. Lathrop of Norton. Dr. Frank Coffey of Hays, and Clarence G. Munns, of Topeka. Dr. Lathrop spoke on "Management of Empyema"; Dr. Coffey presented an illustrated lecture on "Fractures of the Spine".

Principal order of business at a meeting of the Osborne County Medical Society held in Osborne on July 9 was renewal of the county contract for indigent care. Gordon H. Rhoades, a student at the University of Kansas School of Medicine was a visitor and nine members were in attendance.

Repeating their annual summer party, members of the Saline County Medical Society gathered for a picnic at the cabin of Dr. W. E. Mowery on Lake Goodwyn near Salina on July 15. Guests included a group of doctors from other counties and several Salina druggists. The meeting was an entirely social affair featuring golf and trap tournaments and a picnic supper.

The Sedgwick County Medical Bulletin for August reports that since its organization this year, the Medical Service Bureau of the Sedgwick County Medical Society has investigated 234 cases. In an effort to determine the attitude of these patients and to find out how they reacted to pay service, the Bureau selected twenty-five consecutive cases chosen by dates, who had been referred to private physicians. The physicians were asked how well these patients had paid up the financial arrangements which they had agreed upon. Only two of the twenty-five individuals were not paying in a satisfactory fashion.

The Sedgwick County Medical Service plan represents the only sizeable experiment of this kind in the state and its future experience will afford an interesting medical economics study.

Dr. F. L. Menehan of Wichita and Dr. S. A. Fuhring of Wellington were the featured speakers at a dinner meeting held by the Sumner County Medical Society in Wellington on June 17. Dr. Menehan's subject was "The Evolution of Infant Feeding", and Dr. Fuhring discussed "Allergic Conditions of the Nose and Throat".

This First Supplement to the U. S. P. XI has just been released and will become official on December 1, 1937. It is a booklet of about 100 pages in a substantial binding and may be obtained from the Mack Printing Company, Easton, Pennsylvania, from your wholesale druggist, or from any other distributor of the U. S. P., at \$1.00 per copy, postpaid. In this supplement, all of the texts revised to June 1, 1937, are reprinted in full so that there can be no misunderstanding of the authorized changes.

As A Matter of Information—

R

One pair Univis lenses mounted in a Loxit mounting.

Question: Answer: What wholesaler can fill this prescription completely? Quinton-Duffens—they are the only wholesalers in the

territory licensed for both products.

QUINTON-DUFFENS OPTICAL COMPANY

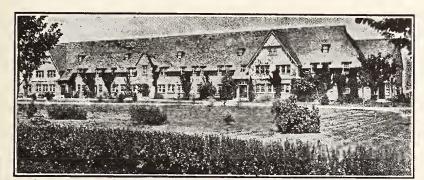
Your Local Independent Wholesaler

TOPEKA

HUTCHINSON

SALINA

WOODCROFT HOSPITAL



PUEBLO, COLORADO

Founded 1896 by Dr. Hubert Work

A modern, newly constructed sanitarium for the scientific care and treatment of those nervously and mentally ill, the senile and drug addicts.

CRUM EPLER, M.D. Superintendent

FIFTEENTH ANNUAL FALL CLINICAL CONFERENCE

of

THE KANSAS CITY SOUTHWEST CLINICAL SOCIETY MUNICIPAL AUDITORIUM, KANSAS CITY, MISSOURI, OCTOBER 4, 5, 6, 7, 1937

Two English and Fourteen American Guest Speakers. See Page • of this issue for details.

Two Symposia Daily, 8:30 A.M. to 12:00 Noon:

Heart, Circulation and Lungs; Industrial Surgery.

Obstetrics, Gynecology and Pediatrics; Urology and Syphilis.

General Surgery; General Medicine and Proctology.

Afternoon scientific sessions, daily: guest speakers only.

Round table luncreons, daily: guest speakers.

Scientific and technical exhibits, daily.

Evening features:

Public health meeting, three guest speakers, October 4, 1937. Smoker, October 5, 1937.

Alumni dinners, October 6, 1937.

O.O.R.L. dinner, October 7, 1937, two guest speakers.

Additional entertainment features.

Entertainment for the visiting women, daily.

MEMBERS

Dr. Paul Anderson of Marysville has left for Porto Rico, where he will work for a governmental clinic.

Dr. P. S. Brady, who has been practicing in Plainville for the past seven years, has moved to Hays.

Dr. W. C. Brownell has left Marquette, where he has practiced for the past eleven years, to establish a joint practice with his son Dr. Galen Brownell in Kansas City.

The South Haven "New Era", under date of July 8, carries a tribute to Dr. T. J. Hollingsworth of South Haven, who has carried on a practice in that community for sixty years.

Dr. William L. Mermis, who has been in Wichita for the past six months, has returned to Kingman where he will resume his practice.

The program of The Fifteenth Annual Summer Graduate Course in Opthalmology and Otolaryngology held in Denver, Colorado, from July 26 to August 7, included Dr. Ernest M. Seydell of Wichita as a featured speaker. Dr. Seydell lectured on the following subjects: "Acute Otitis Media and Mastoiditis; Lateral Sinus Thrombosis Petrositis; and Consideration of Some of the Important Intracranial Complications of Otitis Media and Mastoiditis."

Dr. R. M. Stapp has recently moved from Horton to Morrill, where he has established practice.

Dr. R. H. Rollow has announced the sale of his practice in Thayer, but has not decided where he will resume his medical career.

The Board of County Commissioners of Gray County has announced the appointment of Dr. J. W. Spearing of Cimarron as county health officer.

A course in electrocardiography was held in Kansas City on five consecutive Sundays, beginning June 27. The course was given by Dr. Graham Asher of Kansas City. Missouri, and lectures were held alternately at the University of Kansas and General Hospitals. Kansas physicians taking the course were: Dr. Roy W. Fernie, Hutchinson; Dr. James J. Butin, Chanute; Dr. Adolph Boese, Coffeyville; Dr. A. S. Hawkey, Newton; and Dr. E. O. King, Herington. A similar series will be held commencing October 10.

DEATH NOTICES

Dr. William Cecil Burnaman, 52 years of age, died at his home in Washington on July 1 following several months of ill health. Dr. Burnaman graduated from Washington High School in 1903, and Lincoln Medical College, Lincoln, Nebraska, in 1908. He established practice in Hollenberg immediately upon receiving his degree and five years later moved to Washington, where he had since manitained his office. He was county coroner several terms; county health officer eleven years. In 1928 he was appointed as a member in the Kansas State Board of Health and he served in that capacity during the terms of three successive governors. At the time of his death Dr. Burnaman was a

member of the Kansas State Board of Medical Examination and Registration, and Washington County Medical Society.

Dr. Charles Howard Jameson. 52 years of age, died suddenly at his home in Hays on June 18. He was graduated from the Washington University School of Medicine in 1908 and interned at the City Hospital in St. Louis. In 1910 Dr. Jameson settled in Hays, where he had practiced continuously until his death. He specialized in surgery and was a member of the Central Kansas Medical Society and American College of Surgeons.

ANNOUNCEMENTS

A most interesting and instructive program for the Fall Clinical Conference of the Kansas City Southwest Clinical Society to be held in Kansas City, Missouri. October 4, 5, 6, 7, is nearing completion. The four afternoon sessions will be devoted entirely to presentations by guest speakers, part of whom will also participate in the two sections to be presented each morning by members of the society.

This year's plan presents two large sectional groups each entire morning including medicine, industrial surgery, obstetrics and gynecology, pediatrics, syphilis, urology, surgery and proctology. Subjects for discussion have been particularly chosen by the program committee for each lecturer and an excellent medical program can be expected.

Guest speakers for this conference include Dr. Alfred E. Barclay of Oxford and Sir George Lenthal Cheatle of London, England; Dr. R. B. Cattell, Boston: Dr. Frederick A. Coller, Ann Arbor; Dr. Wm. D. Gill. San Antonio; Dr. Arnold Jackson, Madison: Drs. Richard H. Jaffé, Herman L. Kretschmer and P. B. Magnuson, Chicago; Dr. Otto H. Schwarz and Father A. M. Schwitalla, St. Louis; Dr. Ferris Smith. Grand Rapids; Dr. Fred M. Smith, Iowa City; Dr. Robert A. Strong, New Orleans: Dr. Owen H. Wangensteen, Minneapolis; Reverend Burris Jenkins. Kansas City. Missouri;

From all appearances, it can be safely stated that the Fall Conference promises to be the most attractive in the history of the society and warrants a full attendance.

The Pan American Medical Association announces it will hold its Seventh Cruise-Congress aboard the M/S Queen of Bermuda departing from New York. January 15 for Havana. The ship will serve as hotel during the five days of the Congress in the Capitol of Cuba. Headquarters of the Convention, in Havana. will be the National Hotel where scientific sessions will be held. Leaving Havana on January 23 the Queen of Bermuda will proceed to Port au Prince, Haiti, remaining there for the day when she will sail for Trupillo City. Santo Domingo, at which city another day of meetings and sight-seeing will be available for Cruise-Congress Members. After leaving Trupillo City the next port of call will be San Juan the capital of Puerto Rico. The Cruise-Congress ends the morning of January 31 upon the arrival of the Queen of Bermuda in New York. Those interested in securing detailed information should address the Pan American Medical Association. 745 Fifth Avenue.

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The next written examination and review of case histories of Group B, applications by the American Board of Obstetrics and Gynecology will be held in various cities in the United States and Canada on Saturday, November 6, 1937.

The next general examination for all candidates (Group A and B) will be held in San Francisco, California, on June 13 and 14, 1938, immediately prior to the American Medical Association meeting.

Application blanks and booklets of information may be obtained from Dr. Paul Titus, Secretary, 1015 Highland Building, Pittsburg (6), Pennsylvania. Applications for these examinations must be filed in the Secretary's office not later than sixty days prior to the scheduled dates of examination.

BOOK REVIEW

PHYSICAL DIAGNOSIS: Seventh Edition—By Warren P. Elmer, M. D., Associate Professor of Clinical Medicine, Washington University School of Medicine; and W. D. Rose, M. D., Late Associate Professor of Medicine in the University of Arkansas. Published by The C. V. Mosby Company, at \$8.00 per copy.

This is a revised edition of a valuable textbook. The previous edition was a revision of the late Dr. Rose's work, rearranged and subject matter rewritten by Dr. Elmer in a very commendable manner. The arrangement restricts its use to that of a teaching text.

Part I is entitled "The Technic of Physical Examination and Physical Examination of the Normal Body" It opens with a seventy page discussion of topographical and clinical anatomy and physiology of the thorax, circulatory system and abdomen, with their contents. This valuable, but usually neglected part is well condensed. There follows a few pages on Preliminary Observation including speech, gait, station, habitus, and body temperature. The author says "I have endeavored to cover each diagnostic procedure before taking up another. instance, the inspection of the entire body is discussed before palpation is introduced. In practice, this plan may not always be advisable, but students, in my experience, have a better working technic when this plan is followed". Whatever one's opinion may be concerning this arrangement; the contents of the chapter on inspection, palpation, percussion and auscultation are complete and concise and best of all, retain the classical signs which, in addition to their practical value, keep alive the names of the great pioneers in this most important branch of the practice of medicine. The section on special diagnostic procedures includes chapters on radiology and electrocardiography, which could probably be omitted because of their necessary brevity and incompleteness.

Part II is a comprehensive text on physical diagnosis of diseases of the respiratory and circulatory systems in the usual manner with a final chapter on diagnosis of abnormalities of the heart beat written by Dr. Drew Luten of St. Louis. This chapter is well written, with emphasis on signs and symptoms rather than mechanical diagnostic devices.—Don C. Wakeman, M. D.

The best way to suppose what may come, is to remember what is past.—Halifax.

NEW BOOKS RECEIVED

A 'TEXTBOOK OF SURGICAL NURSING—By Henry S. Brookes, Jr., M.D., Instructor in Clinical Surgery, Washington University School of Medicine, St. Louis, Missouri .Published by The C. V. Mosby Company at \$3.50 per copy. Octavo, 636 pages with 233 illustrations.

The publisher states that this text is written through the combined efforts of a surgeon and a nurse, both of whom have had wide experience in hospital care of surgical patients. Its coverage seems quite complete, considering such surgical specialties as urology, gynecology, orthepedics, the chest, and the eye, ear, nose and throat, with chapters of particular interest on the relation of the nurse and her patient and medicolegal points.

THE LABORATORY DIAGNOSIS OF SYPHILIS—The Theory, Technic and Clinical Interpretation of the Wassermann and Flocculation Tests with Serum and Spinal Fluid. By Harry Eagle, M.D., Lecturer in Medicine, Johns Hopkins University Medical School, with foreword by J. Earle Moore, M.D., Associate in Medicine, Johns Hopkins University. Published by The C. V. Mosby Company at \$5.00 per copy. Octavo, 440 pages with 27 illustrations. Dr. Moore in the foreword states that this text is a presentation of practical details, including the descriptions of various sources of error in these tests, and the medical detective work essential to trace them to their origins. For the practicing physician as well as the laboratory worker.

Sections on The Wassermann Test; The Flocculation Tests For Syphilis; The Examination Of The Spinal Fluid; Tests For Syphilis Other Than The Wassermann Reaction Or The Flocculation Of Tissue Lipoid: The Clinical Evaluation Of The Serologic Report; The Statistical Comparison Of Serologic Technic And The Method Of Choice.

HEART FAILURE—By Arthur M. Fishberg, M.D., Associate In Medicine, Mount Sinai Hospital, New York City. Published by Lea & Febiger at \$8.50 per copy. Octavo, 788 pages, illustrated with 25 engravings.

The publisher states that this book is intended primarily for the general practitioner. Recent studies of cardiac output, velocity of blood flow, circulating blood volume, venous pressure, the respiratory volumes, and the gas contents and reaction of the arterial blood are all described in detail and are related directly to practice. Special emphasis is placed on the pathogenesis of the individual symptoms of heart failure, knowledge of which is indispensable to rational treatment. Peripheral circulatory failure and shock are discussed at length and the various forms of circulatory failure are classified on the basis of the nature of the disturbance in circulatory dymanics.

SYNOPSIS OF DIGESTIVE DISEASES—By John L. Kantor, M.D., Associate In Medicine, Columbia University. Published by The C. V. Mosby Company at \$3.50 per copy. Octavo, 302 pages, with 30 hand drawn illustrations by Mr. Alfred Feinberg.

The author in the preface states that, "This book is an attempt to present simply, clearly, and concisely, the essential facts concerning the diseases of digestion." In four parts, namely, General Considerations; Diseases of the Digestive Organs; Diseases Due To Intestinal Parasites; and Digestive Symptoms in Extradigestive Diseases.

PROTECTION OF VITAMIN C IN CANNED FOODS AGAINST ENZYMATIC DESTRUCTION

• One of the unusual features of modern food preservation by canning is the high degree of protection afforded vitamin C during the canning procedure. Of all the vitamins, C is probably the most readily destroyed. Spinach, for example, will lose one-half its vitamin C content upon standing three days at room temperature and practically all of its antiscorbutic potency in seven days' time (1).

Oxidation is the principal factor operating in the destruction of vitamin C. The rate of oxidation depends—among other things upon temperature, degree of exposure to oxygen, and presence of substances which catalyze the oxidation reaction. Chief among the catalysts is the enzyme known as ascorbic acid oxidase. This enzyme is instrumental in the loss of physiologically active forms of cevitamic acid (ascorbic acid) by catalyzing the transformation of this latter substance into dehydrocevitamic acid (dehydroascorbic acid), which is more readily decomposed by a nonenzymic reaction into a compound having no antiscorbutic activity. This enzyme is apparently widely distributed in the

vegetable kingdom, having been found in cabbage, carrots, lima beans, parsnips, peas, pumpkin, spinach, squash, string beans, sweet corn and swiss chard. Fortunately, the cevitamic acid oxidase is completely inactivated by heating to 100°C. for one minute (2).

In modern canning practice field crops are harvested at the optimum stage of maturity and canned as rapidly as possible—usually within a few hours' time. Early in every canning procedure the product receives either a blanch or a pre-cook or exhaust, the primary purpose of which is to drive out air from biological tissues and to establish a vacuum by expanding the contents of the can by heat, contraction upon cooling resulting in a partial vacuum within the can. These pre-liminary heat treatments together with the heat process serve both to destroy oxidative enzymes and to remove most of the air from the can.

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(1) 1936, Food Research, 1, 1

(2) 1936, J. Biol. Chem., 116, 717

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RECENTLY ACQUIRED KNOWLEDGE OF CANCER METABOLISM

(Continued from page 341)

mentally that the administration of hypophysary hormones will increase the growth rate of tumors. On the other hand during the course of a tumor, the extirpation or destruction by radium of the hypophysis, according to Lacassagne method, will slow down the growth or inhibit the grafting of a tumor. Such an action. however, seems well demonstrated in cases of breast hyperplasia, but still uncertain in other tumors.

The various opinions about the action of the hypophysis are still so contradictory that the writer accepts entirely the views of Sannie' and Alphandery. According to such views, the role played by the hypophysis is very uncertain and never has been well demonstrated, although a considerable amount of prolan has been obtained from urine of cancer-bearing patients. The changes in the thyroid are not very characteristic and constant, while those in the suprarenal are still very contradictory. With the exception of the sex hormones, the importance of the other glands in stimulating or inhibiting tumor growth is very slight. The two authors conclude that possibly the growth of cancer seems to be the result of metabolic disturbance of the sterols.

As to insulin, various reports have confirmed its inhibiting role on cancer growth. The mechanism of such inhibition is still uncertain.

Triptophane seems to slow down the growth of tumors.

VITAMINS AND OTHER STIMULATING PRODUCTS

Centanni was the first to demonstrate that aromatic substances and particularly indol, stimulate the development of neoplasm. To these substances Centanni gave the name of blastins. The importance of the diet is certainly indisputable, as diets based on gelatin or without green vegetables are detrimental to the growth of the tumor. Funk admitted the importance of vitamins and demonstrated the presence of some special stimulating vitaminlike substances in the tumors. It was the new technic of tissue cultures which made available a large amount of material for study. All tissue, in order to grow in plasma need the addition of special substances, activating the development of cultures in vitro. Such substances are called trephones and are extracted from embryonal tissues or from leucocytes. They have been compared to hormones or better to vitamins,

although they might be considered as easily available material for the synthesis of new protoplasma. The cancer cells do not need trephones, as they contain in themselves some excito-proliferating principle, which is capable of stimulating in vitro the growth of embryonal tissues and conferring on them a neoplastic character.

Vitamin C, a highly reducing substance, can be extracted from experimental tumors, as tumor cells utilize it, just as the normal cells do. Animals kept at a low vitamin content or better on a scorbutic diet, will exhaust their reserves in Vitamin C more readily if they are bearing a malignant tumor which is rapidly growing. However salts of Vitamin C have been used in therapy.

Vitamin A seems definitely to retard the growth of malignant tumors, either by stimulating the natural defenses or possibly by direct action on the neoplastic tissue. Experimentally local application of large amounts of Vitamin A on ulcerated tumors have proved to facilitate healing and disappearance of the tumor nodules. Similar experiments on tubercular ulcers did not show similar results, as the lesions were made worse. However, the large amount of Vitamin A necessary to bring about results in the treatment of ulcerated cancer and the dangers of hypervitaminosis limit essentially such therapeutic applications.

Wheat germ oil proved without effect on the growth and development of tumors.

The lack of Vitamin E seems to favor the growth of tumors, as young chicks receiving a diet treated with ferric chloride to destroy Vitamin E developed malignant lymphoblastomas.

The lack of Vitamin B seems, according to some authors, to inhibit growth. As can be seen, great confusion and contradiction still exist on the role of vitamins in tumors. Some authors hold that Vitamin A stimulates the growth, Vitamin C strongly inhibits, while D is without influence. Further studies seem necessary to settle all the contradictory literature on the subject.

The role of tobacco and chronic nicotine poisoning as a possible carcinogenic agent appears more important due to its extensive use by the human race. Some experimental data are now available, indicating that nicotine produces in animals enlargement and adenomatous nodules of the adrenal.

ANTAGONISTIC GLANDS

The conception of Fichera is that cancer arises as a consequence or as a result of the un-

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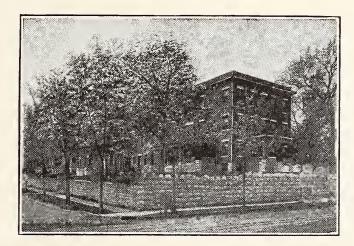
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balance of the organic forces inhibiting cell Thymus, spleen, lymphatic multiplication. tissue, bone marrow, possess distinctly antineoplastic activity, but the growth stimulating sex hormones may reduce the restraining forces and cause growth of malignant tumors. This theory of the illustrious Italian scientist, has been the basis for the treatment of neoplastic diseases with extracts of thymus, spleen, etc. Some authors, observing the infrequent number of metastasis or primary tumors in the spleen, have conceived that possibly the reticuloendothelial system, which plays an important role against infectious disease, is also equally able to exercise protective activity against cancer.

The results have been far from concordant and the theories, as well as the therapy, have been subjected to severe criticism. The theory, however, contains some very important elements which cannot be disregarded, but need close attention and further study.

We have mentioned in a previous paragraph the inhibiting role of insulin, which by local application or by injection, and better if associated with some other therapy, provokes retrogressive changes in tumors and accelerates the healing by radiation.

VIRUS PROBLEM AND LABORATORY DIAGNOSIS

The virus problem has still many and valid supporters and the pros and cons are equally divided, without reaching as yet any conclusions. In experimental tumors, the virus supporters do not believe that even the more purified and synthetic chemical agents have anything to do with cancer. They provoke some cellular changes, that is, they bring the cells to the brink of malignancy, but their action after such changes is doubtful. To follow an example of Rous, they act like the catapult, that springs an airplane from the deck of a ship, giving it an initial velocity only. So in cancer the virus problem is still disputed by scientists and the new Shope virus has furnished new material for study and polemics.

Concerning the nature of the virus differences of opinion still exist. At the present time various researches are in progress trying to inactivate the viruses with different enzymes, in order to determine their nature. The results of such researches are still uncertain. Pentimalli, by using the adsorption with aluminum hydrate and inactivation with pancreatin, has reached, in a series of experiments, the conclusion that the viruses of malignant tumors, in particular the Rous and Fujinami strains, are chemical substances, very probably

a protein. The active principle is produced through disturbed energetic metabolism of the cell and is capable of influencing other cells, on which it may be fixed.

Without taking at the present time any side in the question, it is better to point out that the same controversy exists for the bacteriophage as for the viruses of leukemia and that we are still far from reaching a solution. The problem of virus in leukemia has been discussed by the writer in another paper and for lack of space will not be discussed here.

The early serological diagnosis of cancer has been a very interesting field of work, but so far no definite results have been obtained. writer has been interested several years on such a problem and various tests with different antigens have been performed. The results have been poor. The Bothelo reaction, the complement fixation, the Ascoli test, the Roffo test, have been tried, but they are not completely specific nor obtained sufficiently early. The enzyme reaction of Sivori seemed to the writer rather promising. It is based on the fact that cancer cells, brought into the blood stream, will give rise to particular enzymes, which theoretically at least, should be noticed even at an early stage of the process. However, technical difficulties in the preparation of antigen and the importance of the pH on the course of the reaction, have been so far a serious hindrance to the test.

At present the Freund-Kaminer cytologic reaction still holds a prominent place. It is based on the finding that normal serums contain an agent which cytolizes cancer cells, while serum taken from patients bearing a tumor does not contain such an agent. Recently, the agent has been considered as belonging to the saturated aliphatic dicarboxylic acids. Some new refinements of technique have been introduced taking into account the molar concentration of the solutions and their pH, so that new hopes may be formulated on the practical application of the test.

The Hirszfeld's complement fixation reaction seems to be still very doubtful in its practical application. Based on the principle of an antigen prepared with tumor lipoid extracts, the antigen has been strengthened with various agents, such as lecithin and cholesterol. The writer had some experience with a similar antigen that he prepared with the acetone insoluble reaction of a very cellular tumor, to which was added lecithin. The results were rather uncertain, particularly in the early cases where a serological diagnosis is most needed.

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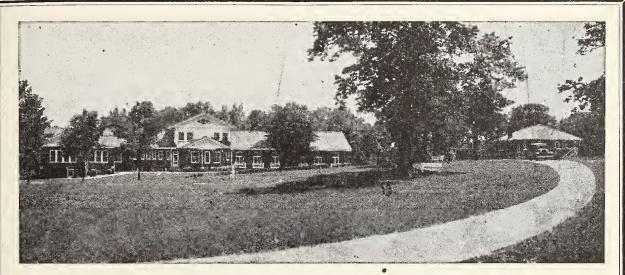
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CONCLUSIONS

At the present state of research morphologists need not fear any sudden change in the cancer problem and its diagnosis, as more enlightened morphology supported by the histochemistry and histophysiology still hold the place of honor. The multiple approaches to the cancer problem already passed in review all indicate the steady advance toward a more complete knowledge of this subject.

Askanazy takes into consideration for the experimental study of cancer, the general constitution, the local predisposition and exogenous and endogenous irritation.

Drukrey, discarding all the abnormalities in the metabolism of cancer patients as secondary phenomena, assumes that the cancer cell is not an embryonic cell as it is still considered by many, but a mutation, a structurally altered cell, which will transmit to its descendants such an abnormal character.

Recently Needham has tried to apply to carcinogenesis the theories and conclusions of experimental embryology, but his work although very interesting does not as yet give any insight into the real problem.

We shall instead consider the problem from a general point of view and take into account the altered metabolism of the individual. (1) Changes in ionic distribution; (2) an excess of potassium; (3) a defective carbohydrate metabolism, with the cancer cells unable to utilize the oxygen; (4) a defective lipoid metabolism with hypercholesterinemia; (5) a defective sulphur metabolism, bringing as a consequence a lack of differentiation and organization; (6) possibly endocrine disturbances, particularly of the sexual glands, are all metabolic factors, which must be taken into account in the pathogenesis of neoplastic diseases. The clinical experience should come to support such conceptions. The problem is rather complex and will not be solved by any great discovery of the cause of cancer. The solution will come, as it is coming, only through a fine analysis of all the cellular phenomena and of the various factors which keep in balance growth, development and life of the entire organism.

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References have been limited to the more important, as the paper, as a review of the problem, is addressed to the general practitioners.

FORMULA NO. 1020

The Bureau of Investigation reports that the latest development in the career of John R. Brinkley, Del Rio, Texas, is the promotion of formula No. 1020. This concoction, it seems, is given to patients who have previously submitted themselves to the personal ministrations of J. R. Brinkley and who are willing to spend sums like \$100 for six ampules of the new remedy, in order that they may be still further benefited by his extraordinary talents. From an examination of the product made in the A. M. A. Chemical Laboratory it was concluded that a solution having essentially the same characteristics as that labeled "Formula No. 1020, J. R. Brinkley, M.D." may be prepared by dissolving one part of indigo in 100,000 parts of water. Such a solution is essentially water to which has been added a dash of blue dye. The kind of genius capable of taking a body of water like Lake Erie, coloring it with a dash of bluing and then selling the stuff at \$100 for six ampules represents a type which all the world up to now has never been able to equal. John R. Brinkley is the absolute apotheosis in his field .-- J. A. M. A., April 3, 1937, p. 1196.

AUGUST, 1937



SUMMER!

Summer days show a marked increase in accidental injuries. The vacationist, the farmer, the child at play may all suffer wounds contaminated with spores of tetanus and gas gangrene-producing bacteria.

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We are in receipt of part two of the Kentucky Medical Journal. This section is a quarterly devoted entirely to the Kentucky Medical Auxiliary. Its forty pages are filled with interesting and instructive articles. Kentucky is the only state which has its own Auxiliary publication.

To what practical, helpful civic projects various state auxiliaries have turned their talents may be of interest and, perhaps, suggestive to our state and county chairmen. Many state activities may be developed by county auxiliaries.

Alabama is giving milk and clothing to the poor and supporting a scholarship fund.

Arkansas has a fund to supply obstetrical kits where they are most needed.

California, among other projects, has helped raise money for a swimming pool for the use of sufferers from infantile paralysis, and has also helped support an orthopedic school.

Colorado, in addition to benevolent projects adopted by respective counties, as a state has undertaken the raising of money for a physician's benevolence fund.

Florida, among numerous activities, has waged a campaign to make it necessary for domestic service to have health cards.

In Georgia eager women are raising money for a student loan fund that has already helped nine young men complete their medical education. In addition, a campaign for mother welfare provided pre-natal, natal and post-natal care to poor of the white race.

Indiana held all day health conferences for parentteachers associations. Minnesota: A sale of hand made articles has earned \$900.00 for a tuberculosis sanitarium. Also, poor children in rural schools are receiving cod liver oil through the generosity of that auxiliary.

North Carolina supports a bed in a tuberculosis sanitarium and has named it after the organizer of the state auxiliary.

In Oregon, through the efforts of the state auxiliary, the "healing arts amendments", which would have nullified the benefit of the basic science law, were defeated. Also, a school room for handicapped children was supported by the auxiliary.

Pennsylvania contributes liberally to the physician's benevolence fund and for years has held an all day health conference each spring.

Virginia maintains a bed in a tuberculosis sanitarium. This bed is at the disposal of doctors and their dependents.

In West Virginia in one year auxiliary members made 3,378 new garments for the use of the needy, and mended many more.

Missouri promotes a most successful essay contest. 530 essays contested last year.

Other states sponsor essay contests. Christmas seal work, medical speakers bureau, legislative work of all kinds.

Space is too limited to detail all the projects which engage the various state and county auxiliaries.

Says Mrs. Robert E. Fitzgerald, National President, 1936-37, "When your non-auxiliary friends ask, as they so often do, 'What does the auxiliary do'?" aren't you proud to be able to point to the record of achievement which this inventory brings before you?"

Mrs. Martin Nordland of North Dakota, 4th National Vice President in her news-letter states: "An organization program consists not only in organizing new units, but also in keeping the organizad units active and the members interested."

The number of cases of syphilis reported to the state board of health by the physicians of Kansas the first half of 1937, is double the number reported during the same period in 1936. There were 439 cases reported to July 1, 1936, whereas up to the same date this year more than 900 cases were reported. The large venereal disease clinics in Topeka, Kansas City and Wichita report a marked increase in the number of patients applying for treatment. Physicians all over the state are requesting free drugs supplied by the state board of health, for the treatment of indigent patients. Such requests are received daily. There is also a brisk demand for the educational literature furnished free by the state board of health. Requests are now being received for speakers on the subject of venereal disease, to fill lecture engagements next fall.

There is no syphilis epidemic in Kansas. The increased reporting is a wholesome sign that existing cases are receiving treatment, as there were probably as many cases of venereal disease in the state last year as there are this year.—Kansas Health.

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SURGERY OF THE LARGE BOWEL*

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The ideal surgical procedure for removal of malignant tumors of the colon would be one in which the involved segment is extirpated and the bowel is reunited as a single stage procedure. Such an operation can be carried out on the small intestine, particularly the proximal portion, and with minimal hazard. A similar maneuver on the large intestine however, is attended by an unavoidably high risk, especially if the left half of the colon is the segment under consideration. It is obvious that the high mortality accompanying single stage operations for the removal of tumors of the colon prompted Mikulicz to devise a procedure that could be carried out in several stages. His exteriorization operation found world-wide favor, and in innumerable instances satisfactory results have been obtained following its use.

The true Mikulicz method of removing malignant tumors of the left half of the colon consists in bringing to the exterior of the abdomen the involved segment of bowel, closing the layers of abdominal wall closely around it, and then, after the lapse of five to seven days, amputating the exteriorized loop. Subsequent closure of the double-barrel colonic stoma (final stage) is carried out two to four weeks later. In Mikulicz' operation only a small portion of the mesentery is removed to avoid retraction of the exteriorized segment before amputation is carried out. Another undesirable feature of this type of resection is that the malignant lesion is allowed to remain in close proximity to the abdominal wound for several days, during which time local transplantation of the malignancy may occur. This factor and the removal of a scant portion of mesentery

apparently accounts for many of the local recurrences which have come to my attention following this type of procedure. Many of these secondary local recurrent processes are amenable to surgical removal, but such procedures are considerably more difficult than the primary operations. Judd resected, by the Mikulicz method, a lesion in the descending colon; local recurrence developed in seven months, and a second operation, similar in method to the first, was carried out. Fifteen months later, another local recurrence developed, and he carried out another resection. Twenty-nine months elapsed before another malignant tumor presented at the operative site. Radical excision was then carried out, this time a portion of the surrounding abdominal wall and a wide segment of adjoining mesentery being removed. Thirteen years have passed since the third operation and the patient, a woman now aged sixty-four years, is apparently in good health.

One might cite many instances of local recurrence following the type of operation under discussion, in some of which permanent relief has apparently been obtained after multiple resections whereas, in others, further surgical intervention has been useless because of distant metastasis in addition to the recurrence of the process at the site of the first resection. At this point I would like to emphasize that, if local recurrence develops, an attempt at surgical removal should be made unless there is positive evidence of metastasis.

During the past six or eight years some modifications of the Mikulicz procedure have been made which, in my opinion, have decreased the morbidity and mortality following segmental resection of the left half of the colon and which have also permitted more radical excision of the neoplastic growth, thereby affording a more favorable prognosis. These modifications, which are about to be described, seem to give the operation distinct advantages

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over the Mikulicz procedure. In the first place it is possible to make wider excision of the mesentery adjacent to the involved segment of bowel, which permits removal of involved lymph nodes if any such are present. Another advantage is that the segment of bowel is freely movable. The mesenteric rent is closed, after which the proximal and distal limbs of the colon are approximated by interrupted sutures, as if a side-to-side anastomosis were contemplated. The layers of abdominal wall are then closed around the exteriorized loop as in the Mikulicz operation. Next, a clamp is placed on the limbs of the segment of bowel to be removed and amputation by cautery is carried out. The wound and cut ends of the intestine are covered with vaseline gauze. On the day following operation (twenty to thirty hours postoperatively), the proximal segment of colon beneath the blade of the clamp is punctured by means of a cautery to allow the escape of intestinal gases. The clamp is not disturbed but it becomes detached automatically—usually on the sixth post-operative day. At this time, or within a few days, a clamp is applied to the colonic spur as a step toward closure of the fecal fistula. The segments of bowel have been sutured together, which precludes the possibility of injury to the small intestine, as might occur. I have observed cases in which such accidents have occurred and some in which death ensued; in others, an immediate operation of considerable magnitude was necessary to bring about repair of the intestines and closure of the fistula.

Following crushing of the spur of the double-barrel colonic stoma (which requires about a week), the anterior portions of the proximal and distal segments of bowel are freed by accurate anatomical dissection and are approximated by means of chromic catgut, thus effecting closure of the colonic stoma. As a rule closure can be made without opening the peritoneal cavity. However, if closure is difficult, it is my practice to open the peritoneal cavity in order to secure better mobilization. I have not observed a case in which any difficulty arose from intraperitoneal closure and I urge adoption of the plan in cases in which closure is hard to effect. In all operations for closure of the colonic stoma, the fascia must be carefully approximated over the sealed fistula in an effort to prevent hernia. At times the colonic stoma will close without surgical interference after crushing the spur; as a rule, however, considerable time elapses before complete healing eventuates.

I employ this type of operation in resecting segments of the hepatic flexure, transverse colon and descending or left half of the colon. It has been my experience that a transverse abdominal incision affords the best exposure for resecting the transverse colon and splenic flexure; in such incisions the rectus muscles are divided. According to my observations, no difficulty such as ventral hernia ensues, and I feel safe in stating that I have employed the incision in at least fifty such cases.

Some American surgeons (Lahey and others) advise the type of operation known as "exteriorization" for removal of lesions of the cecum. I do not use this procedure in such cases however, because of the liquid nature of the contents of the ileum which causes marked excoriation of the surrounding skin and in many instances enhances the difficulties incident to closing of the fistula.

As a rule, a perforated lesion of the descending colon seals itself to the parietal peritoneum. According to my experience, the removal of such lesions is best executed by first excising the surrounding peritoneum, which has served as a patch preventing gross contamination; after this maneuver the procedure is as previously described for the exteriorization operation. Perforation, which occurs on the mesial aspect of the colon, frequently breaks into the lumen and may involve one or more segments of the small intestine, making it necessary to resect the latter and then exteriorize the colonic lesion.

The mortality rate of the operation of exteriorization and resection varies somewhat with the extensiveness of the procedure. At present our death rate at the clinic is between eight and twelve per cent for such operations, which in my experience compares favorably with, if indeed it is not better than, the death rate following the Mikulicz procedure. The operation also gives a better ultimate prognosis, because it is more radical and therefore decreases the chance for local recurrence since the lesion is removed at the first operation. It is not my intention, however, in any way to discredit the Mikulicz procedure; I merely suggest some modifications which according to my own experience have proved of considerable value.

Malignant tumors of the colon can be removed by means of some type of segmental resection, with reestablishment of the continuity of the bowel, using that portion of the colon proximal to the pelvic colon or rectosigmoid. In the past, lesions in the last-named location have been managed surgically in the majority

of instances by some type of resection which made permanent colostomy unavoidable. However, in the last few years I have endeavored to resect lesions in this distant portion of colon in such a manner as to preserve the rectum. In so doing, a colonic stoma is first established in the transverse or descending colon as the first stage of the procedure. At the second stage, which is usually weeks after the first operation, the abdomen is explored through a low midline incision. The pelvic colon is then well mobilized by freeing the peritoneal attachments on both sides of the intestine and along the base of the bladder (in the male). The upper hemorrhoidal vessels are ligated, and the sigmoid is removed by radical pelvic dissection and combined abdominoperineal resection. The bowel is amoutated in the region of the upper part of the rectum and an end-to-end anastomosis is made between the lower portion of the descending colon and the rectum. The colonic stoma is closed two or three weeks subsequently. In my opinion this procedure is applicable to those lesions occurring at or near the pelvic peritoneal fold. Malignant processes in this region do not spread downward, and therefore there seems to be no reason for removal of the rectum in such instances. I have performed the operation in ninety cases, with a ten per cent mortality. Those who survived have been spared the inconvenience of a permanent colonic stoma.

PREOPERATIVE MANAGEMENT

In discussing surgery of the large intestine it seems worth while to mention briefly some of the various methods of rehabilitation which we have employed at The Mayo Clinic during the past few years. One realizes full well that standardization of the preoperative, operative, or postoperative management in such cases is quite impossible, but it does seem that some general scheme of preoperative or postoperative care might be employed quite universally in colonic surgery. For instance, it has been of advantage for all patients who are to undergo an operation on the colon to be in the hospital three to five days preoperatively. During this period the diet is regulated so that it is poor in protein content but rich in carbohydrates. If obstruction is present, treatment is carried out as described later in this paper. If there is no obstruction, the bowel is cleansed by means of a mild saline cathartic and saline irrigations by rectum. In all cases in which there is coexisting anemia, we attempt to restore the blood preoperatively by means of transfusion to a

level where surgical interference seems justifiable. Of course anemia is far more prevalent when the lesion is situated in the cecum or right half of the colon. When marked anemia is present in association with a lesion in the left half of the bowel, its cause is either direct loss of blood from the site of the tumor or metastasis, which is usually of generalized character. A malignant tumor of the right half of the colon rarely if ever causes obstruction, since the content of that portion of the intestine is liquid in nature. Obstruction is more common in the left half or descending portion of the bowel because of the semi-solid character of its content. Some surgeons, particularly those in America, feel that if there is partial obstruction of the descending colon or sigmoid surgical decompression, cecostomy or ileostomy, should be made.

It is important at this point to emphasize the opinion of the late Sistrunk with regard to the relief of partial or complete obstruction which has resulted from the presence of a malignant process in the descending colon. His experience caused him to conclude that the best plan of procedure is decompression or relief of the obstruction in such instances by the use of warm saline irrigations by rectum, supplemented by warm abdominal stupes. I find that decompression by this method is highly satisfactory; in fact, it is so satisfactory that I seldom find it necessary to employ surgical decompression. Of about 400 patients with intestinal disease on my service during the past year, surgical interference such as cecostomy or ileostomy was necessary only twice and then it was carried out because of obstruction in a more distal segment of the bowel. If one can avoid such intervention, the number of operative procedures is diminished, which is a great economic advantage to the patient; of even greater importance, however, is avoidance of the additional surgical hazard.

INTRAPERITONEAL VACCINATION

During the past five or six years, increased effort has been made to lessen or prevent peritoneal infection following operations on the intestinal tract. It may be stated at once that no single method has proved to be a specific, although some improvement has, I think, been made in that the incidence of peritonitis as a postoperative complication has been appreciably lessened. It is the consensus of opinion that the more perfect the surgical technic, the less likely is diffuse peritoneal infection to occur. By the

same token, however, it may be said that no operation yet devised for resection of a portion of the bowel is truly aseptic; therefore, preventive measures which tend to immunize the patient against infection are timely. Many years ago Mikulicz attempted to lessen the incidence of peritonitis following colonic operations by vaccinating the patient preoperatively through intraperitoneal administration of killed colon bacilli: however, reactions of a severe nature ensued and he discontinued the procedure. Hermann, working under the direction of Mann and his colleagues at the Mayo Clinic in 1927. discovered that it was possible to immunize laboratory animals against peritonitis by injecting into their peritoneal cavities preoperatively a vaccine prepared from killed streptococci and colonic organisms—these two types being used because they were found to predominate in the peritoneal cavity of those patients who succumbed to peritoneal infection following operations on the intestinal tract. Hermann's experimental studies were so conclusive that clinical application of this method of vaccination seemed warranted.

During the past seven years at the clinic intraperitoneal vaccination has been employed about 3500 times and, since its use, the incidence of peritonitis has decreased markedly if one compares the results with the experience before vaccine was employed. In addition, after making as accurate an estimate as we can it also appears that the deaths attributable to peritonitis following operations on the colon have decreased by two-thirds, or sixty-six per cent. Deaths due to peritoneal infection still occur, but as a rule the organism thought to be the cause of such fatalities is a streptococcus, the exact nature of which has not yet been ascertained.

The technic used in administering the intraperitoneal vaccine is as follows: one c.c. of vaccine in ten c.c. of nine-tenths of one per cent saline solution is injected intraperitoneally at a point estimated to be farthest from the contemplated site of the incision. For instance, if the cecum is to be explored, the vaccine is injected in the left lower abdominal quadrant. The optimal time for vaccination is thought by Bargen and me to be thirty-six hours prior to operation. In the large series of patients who have received the vaccine no complications have ensued. Following administration of the vaccine the temperature usually rises to from 101 to 103 degrees F., but it ordinarily returns to normal within twenty hours. If the lesion has perforated, or if distant metastasis is present, the temperature curve is almost diagnostic, since it fluctuates between normal and 101 or 102 degrees F. for five or six days.

Rixford and I studied the cells of the peritoneal fluid before and after administration of the vaccine to patients and found that, at first, there was a marked increase in polymorphonuclear leukocytes for several hours, but that, after this, the number diminished and these cells were apparently replaced by large mononuclear cells (histocytes) which, according to experimental observation, are far more phagocytic than any other type of cell in the peritoneal fluid. In addition to this cystologic change, it seems reasonable to assume that there is a generalized immunologic effect as a consequence of the vaccination.

Some observers in America have employed substances other than vaccine in an effort to prevent peritonitis, such as amniotic fluid for example. I administered a merthiolated solution of the amniotic fluid of cows (amfetin) in about twenty cases in which colonic operations were carried out, and so far as could be determined the cell count of the peritoneal fluid was at first only slightly increased but, after five to seven days, the monocytic cells increased. When a comparison was made, the incidence of peritonitis was found to be greater than occurs following the use of vaccine, although it was nothing like that without vaccination, and for that reason employment of this substance was Some American investigators discontinued. have also injected the vaccine subcutaneously and obtained apparently fair results. I have had no experience with this particular method.

My personal view regarding the use of vaccine as a preventive measure against peritonitis following colonic surgery is that the procedure seems logical. Perhaps the vaccine we use at present will be improved upon by the addition of other organisms. We have felt, for example, that the inclusion of certain types of anaerobic bacteria might increase its efficiency, and we are working on this problem at present. It is realized that present methods for the prevention of peritonitis are not a closed chapter but, until some more satisfactory agent is found, there seems to be ample justification to continue to care for these patients as we have in the past few years.

POSTOPERATIVE MANAGEMENT

The postoperative management of patients who have undergone intestinal operations con-

sists generally of the same procedures as are employed in the care of other patients who have had abdominal operations. However, some of the details are different. For instance, if a perforated carcinoma of the descending colon has been removed, it has been my policy during the past two years to administer an anaerobic type of serum such as was suggested by Weinberg of the Pasteur Institute for the postoperative management of peritonitis following perforation of the appendix. While it is difficult to evaluate the advantages resulting from the use of sera, it is my impression that the plan is of value. Contamination of a gross character may occur during removal of a carcinoma that has penetrated all of the layers of the wall of the bowel and, when this does happen, the chance for recovery is markedly diminished. Preoperative vaccination evidently prepares the surrounding tissues to a considerable degree for an assault: nevertheless, the immediate prognosis is not good. Perhaps anaerobic bacteria play a major role in the catastrophe which so often follows such gross soiling. There have to our knowledge been no untoward effects from the use of the anaerobic sera; however, all patients are desensitized before its administration.

Blood transfusions are of great benefit to debilitated patients. They are not carried out routinely on my service, but if the patient is anemic and has a stormy convalescence, he will be aided by the transfusion of from 250 to 500 c.c. of blood. This is likewise of much value in the case of elderly emaciated individuals; 500 to 1000 c.c. of blood is often a life-saving measure for patients in shock. We at the clinic invariably employ the indirect citrate method.

Other intravenous therapy consists of the administration of acacia, and saline and glucose solutions, or a combination of the two latter. Acacia (seven per cent) is of value in cases of shock and it may be substituted for blood when the latter is not immediately available. As a rule, 500 to 700 c.c. of acacia will produce a marked elevation in the blood pressure. Saline solution (nine-tenths of one per cent) is of value when the blood chlorides are low and when the urinary output is diminished. A combination of glucose and saline solution may be used in cases in which an increase in the urinary output is essential and in which nourishment is needed. Glucose in combination with saline (nine-tenths of one per cent) or glucose solution alone (five per cent), should be used as a rule. Until recently, in America,

glucose solution in ten per cent concentration was administered intravenously when the caloric intake needed to be increased, and there may still be instances when the solution in this concentration is indicated; ordinarily, however, the five per cent solution will suffice and serve the purpose in a satisfactory manner, and of equally great importance is the fact that it is isotonic. When food and fluids are required, therefore, in the postoperative care and their administration by mouth is not sufficient for requirements, the ideal mixture is five per cent glucose solution intravenously.

Careful estimates made by Coller and his co-workers tend to show that the postoperative fluid requirements is about 3500 c.c. per day, which figure is based on the assumption that 1500 c.c. will be excreted as urine and 2000 c.c. will be needed for tissue fluids and for replacement of the loss during respiration and perspiration. Meticulous care should be exercised in the administration of any fluid intravenously. It is my opinion that serious complications, such as pulmonary edema and even death, result far too often from giving these fluids at too rapid a rate. Obviously a physician cannot be in attendance during the complete maneuver, and unless the nurse in attendance is properly trained and realizes the caution that should be exercised, it is likely that the patient will take into his veins in twenty minutes an amount of fluid which should have been received in one hour. Since this simple and effective method has been employed at the clinic there have been no untoward effects from the administration of fluids intravenously. Into the tube of the apparatus a glass bulb is inserted which makes it possible to measure the rate of flow in drops. Nurses are instructed to keep the instrument regulated so that not more than sixty drops per minute will be given. In order to warm the fluid, a rubber bottle containing hot water is placed over the portion of tube near the site at which the needle is attached.

Fluids by mouth are given in varying degree, depending upon the attitude of the surgeon. For those patients who have had the type of operation which has been called "exteriorization", I find that one-half to one ounce (fifteen to thirty c.c.) of liquid is permissible each hour during the first twenty-four hours after operation. On the second postoperative day two ounces are allowed, and if tolerated the amount is gradually increased until the quantity approaches that of a liquid type of diet about the fifth or sixth day following

operation. At the end of the first week a soft, non-residue type of diet is given; this is gradually amplified so that at the end of four to six days the diet is normal.

SUMMARY

An improved method of removing lesions of the colon has been described. It is modification of the Mikulicz operation. This procedure is more radical than the latter because it includes wide excision of the mesentery adjacent to the growth. Although the procedure has been designated as "exteriorization" the diseased segment is removed at the initial surgical intervention. These features are thought to lessen the possibility of local recurrence.

Preoperative intraperitoneal vaccination is employed as a preventive against peritonitis, and other rehabilitative measures, such as a carbohydrate type of diet and blood transfusion are used.

Fluids must be supplied postoperatively to combat dehydration. Serious complications may arise from rapid administration of fluids intravenously and therefore the rate of flow must be controlled with meticulous care.

FOOD ALLERGY*

CONCERNING DIAGNOSTIC PROBLEMS AND PROCEDURES

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Clinical food allergy includes those symptoms which are precipitated upon the basis of specificity and whose occurrence is always in direct relation to the ingestion of a food. Clinically it may constitute the whole or a portion of any atopic syndrome or may be a part of the characteristic symptomatology of non-atopic entities (as now defined). Three aspects of food sensitization will be discussed at this time. First, the frequency of food as an etiologic agent in the atopic syndromes and in clinical entities not yet classified as allergic diseases. Second, the means by which one makes a diagnosis of food as a factor in these diseases, and third, the nature of food sensitization as it affects clinical procedures.

I. THE ETIOLOGIC IMPORTANCE OF FOOD IN CLINICAL MEDICINE

The etiologic importance of foods will be discussed in regard to that of the accepted atopic

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diseases and to that of the various syndromes not yet generally admitted to be allergic diseases.

FOOD ALLERGY IN ATOPIC DISEASES

In all forms of atopic allergy, save vernal conjunctivitis, the etiologic importance of food is not only to be expected but it is often multiple. I have never been able to demonstrate an actual food sensitization, specific for the conjunctiva in patients with vernal catarrh. This has been done in the case of iritis. It is generally known that food is of much etiologic importance, but the degree of its importance seems to have been underestimated. One still hears that better results would have been obtained in the treatment of eczema if the mother had allowed the childs hands to be restrained. A situation which occurs only when there is an incomplete diagnosis of allergy. In the same vein, one still reads that the diagnostic accuracy of skin testing in eczema is between seventyfive per cent and eighty-five per cent in patients approximately eighty-five per cent relieved. Why only eighty-five per cent relieved? A patient with this degree of relief of eczema is either incompletely diagnosed or does not cooperate with the physician and which ever is the fact should be specifically stated in reports. There are eczema patients who cannot be cleared up, but when this failure is the result of multiple sensitizations, no such comparable degree of relief can ever be attained.

Food is a complicating factor in hay fever with such frequency that it should be evaluated in every patient who is to take pollen treatments. Eyermann1 was among the first to emphasize this act and since then Rowe², Cohen and Rudolph³ and many others have reported upon the importance of food in pollinosis. I4 have called attention to the fact that a patient with ragweed hay fever who was adequately treated with ragweed pollen extract, had symptoms in relation to specific articles in the diet and not in relation to the air borne pollen. Subsequent to this a critical study of the diet was made in patients with hay fever. A compatible diet was found to produce definite changes in the clinical pattern of the disease. These have been detailed elsewhere⁵.

The important consideration now is that foods are a factor in seasonal hay fever except for a very small percentage of the patients. In light of this fact it seems reasonable to recommend its study in pollinosis as thoroughly as in asthma or perennial nasal allergy. This statement has no reference to skin testing with-

out other diagnostic measures. More attention to the diagnosis of food allergy and less reliance upon massive pollen doses has been a successful procedure in our hands.

Perennial nasal allergy (vasomotor rhinitis) (perennial hay fever) is often due to inhalants, particularly orris root, pyrethrum, occupational dusts and in extremely rare instances to contact with pollen throughout the year. This latter condition is not possible in this latitude. There is no scientific evidence to support the contention that a patient may have daily attacks of nasal allergy the year around from pollens incorporated in the house dust during the pollen season. Before this argument can be accepted as a fact, pollen must be demonstrated in the house dust throughout the year. There are patients who remain free of allergy in the winter months following pollen therapy but this is apparently a non-specific effect according to Hansel⁶.

In a previous paper⁷ the importance of food was discussed and today case records were presented8 to show that food was a demonstrable factor in forty-eight of fifty patients with perennial nasal allergy whose symptoms were clinically controlled. If there is any respiratory allergy in which food is a predominant etiologic factor it is in perennial nasal allergy. It is not only the most universal but it is, likewise, the most frequently demonstrable causative factor in more individuals than any other group of allergens. These statements are based upon clinically controlled patients, patients in whom the specific effect could be demonstrated at will and, therefore, there is no possibility that symptoms thought to be due to food, were actually due to some other product.

Asthma of all ages may be precipitated by foods. In a series of fifty patients with asthma, equally divided between children and adults⁸ food was found to be a factor in every patient. The average incidence of food sensitization is slightly higher in the adult with asthma than it is in the child. Not only is the general average of foods higher in the adults, but the frequency of the total food allergic is greater by far than it is in the children. Thus, regardless of age the diagnosis of food allergy is of paramount importance in any patient with asthma.

Another feature of food allergy in the asthmatic is its relation to the secretion of mucous. The chain of symptoms commonly considered as evidence of "bronchitis" or even "bronchiectasis" often can be reproduced at will by

exposure to specific allergens, particularly foods. The secretion of mucous in the bronchii of an asthmatic patient is due to specific allergens, not primarily to the dilatation of the bronchial tubes. During the past four years no single case of asthma has been encountered where there was a necessity for placebos such as lipiodol in the treatment of bronchial secretions of mucous.

The secretion of mucous which disturbs the asthmatic usually can be stopped by the process of making an etiologic diagnosis and carrying out the proper therapeutic measures. Regardless of infinite care and complete cooperation on the part of the patient there will be failure in a small percentage of the patients. This will be subsequently discussed.

NON ATOPIC DISEASE SYNDROMES

The etiologic importance of foods has been determined in a number of disease syndromes which as yet are not included in the category of the atopic diseases. Gay¹⁰ has found that specific foods are an etiologic factor in the prolongation of the peptic ulcer syndrome. His plan of treatment is indeed radical as compared to the ordinary Sippy management. He eliminates the foods found to be incompatible. The final importance of the food factor in this entity is yet to be determined by continued studies and observations. Gay has also noted that specific foods initially depress the secretion of hydrochloric acid and this is followed in turn by a hypersecretion of the acid. In other studies he has demonstrated¹¹ that habitual hyperthermia may be due to food allergy.

It would be a conservative attitude to investigate the presence of allergy in so called "non-surgical gall bladder". The sequence here may be quite in parallel with that of allergy of the nose and sinuses. The congestion, edema and hypersecretion of mucous characteristic of the allergic reaction leading to obstruction with subsequent infection and occasionally colic.

Women are frequently subject to aching pain referred to the inferior surface of the symphysis pubis accompanied by frequency and urgency of urination, which is due to foods.

Occasionally one treats arthritis with success with specific food elimination upon an allergic basis.

These instances need not be enumerated further. The significant fact being that in many disease syndromes other than the atopic allergies food has an apparent specific action, not unlike that in the atopic diseases. Whether this

should be classified as food allergy or as some other form of food dyscrasia is at present debatable.

II. METHODS OF DIAGNOSIS OF FOOD ALLERGY

There are at this time several known methods of diagnosis of food allergy which we have used both individually and in combination. These are namely: History taking; skin testing; the digestive leukocyte response; and clinical trial.

HISTORY

Any attempt to elucidate the specific foods to which a patient is sensitive is apt to meet with failure, save for those foods to which there is a hypersensitive reaction due to the fact that the phenonemon of antianaphylaxis is not in effect. There are, however, certain points to be elicited in history taking, points which indicate the probability of food as a factor. These have been discussed at length previously⁶.

SKIN TESTING

Skin testing was the means by which the field of allergy was discovered and enlarged. It has very definite limitations and to know these is a prerequisite to their use. Vaughan¹² reports that the diagnostic accuracy of food tests are approximately fifty per cent. In my own experience they have not been quite that accurate. There are two features about skin testing to be considered. First is their failure to demonstrate all the causes of allergy due to foods, and the second is, the occurrence of so many skin reactions which are not related to the symptomatology. The food skin tests have a definite role in diagnosis; they present as Vaughan has stated, a point of departure in treatment. Used alone they have practically no value for the number of patients whose symptoms are entirely controlled upon the basis of skin tests is very low indeed. Therefore, the skin test is only an adjunct to diagnosis and should not be depended upon for information which it cannot give. There is no virtue in so called "testing and retesting". While an occasional patient may be so relieved, the process has little effect save to confuse. Last week the patient reacted to wheat, eggs and milk, today to beef, milk and pork and tomorrow to wheat, spinach and asparagus. There are in contradistinction to this certain reactions that seem fixed and definite at every test. Whether these have more importance as etiologic agents than those giving variable skin reactions has not been determined.

What does "point of departure" mean in the therapeutic program? Simply that foods giving skin reactions are eliminated from the diet until their etiologic effect is exhausted and then the process of making the diagnosis is continued by clinical or other laboratory means.

THE DIGESTIVE LEUKOCYTE RESPONSE

In 1933 Vaughan introduced the digestive leukocyte response as the leukopenic index. The test had previously been used as a liver function test by Widal¹³ and as a food test by Joltrain¹⁴ in urticaria. In my experience with several hundred counts using as a diagnostic criterion a general increase or decrease of the cells the test was not clinically successful although it was observed that a leukopenia usually accompanied clinical symptoms.

In October 1934 the digestive leukocyte response tests were made on a severe asthmatic patient. In this study certain fundamental observations were made which lead to a modification of Vaughan's technic. These facts were reported in 1935¹⁵ and again in 1936.¹⁶ This method has subsequently been used by Zeller¹⁷ and Gay¹⁸ and Denny¹⁹ who have corroborated the original definition of a compatible response and have found the procedure of clinical value. The change of the interval used by Vaughan of fifteen, thirty, forty-five, sixty and ninety minutes to one of twenty, forty and sixty minutes, was determined by previous clinical observations in food allergy which indicated that these intervals were the diagnostically important ones in food sensitive patients.

It is not possible at this time to fully evaluate the leukopenic index as a diagnostic measure. Gay, Denny and myself have performed a total of over fifteen thousand of these tests to date and find that it is an indespensable process.

The first prerequisite to the successful use of the leukopenic index is an adequate knowledge of clinical food allergy. This knowledge is, likewise, a necessity when one uses trial diets and makes food additions. If, one is unable to free patients of symptoms by trial diets and food additions, they are very unlikely to aid themselves or their patients by adding the leukopenic index to their diagnostic armamentarium. The test is a laboratory procedure subject to many factors which can influence the findings upon which an interpretation is based.

The second point in the use of the test is the proper preparation of the patient and the correct administration of the test. Patients are not

fed a meal, but merely a test food, without the addition of sugar, spices or condiments. All factors in the test are to be constant except the test food.

The next step in the use of this test is to prove that the counting is done correctly. This is done by two means, by using two pipettes and by comparing the results of two technicians. It is necessary to count 800 cells in order to avoid error. To obtain equal dispersion of the cells I have designed a mechanical shaker and also a special counting chamber on which one can count 800 cells without a refill.

The results of the counts are graphed in order to produce curves. These curves have been classified into the compatible, the indeterminate and incompatible upon the basis of their most likely clinical effects¹⁵. These types of curves are not always in parallel with the increase or decrease of the cell counts, but have been determined by clinical experience.

The digestive leukocyte response is subject to the influence of the incidence of a food in the diet, hence, it must be interpreted upon this basis. The variations of the response in relation to the use of a food has previously been discussed¹⁵.

The phenomenon of antianaphylaxis may or may not be eliminated as one desires, but if it is not eliminated interpretation should be made on this basis and not as though its effect were removed.

In summation it may be said of the leukopenic index: Its actual diagnostic value is vet to be determined. There are a number of factors to be considered in its use, namely, an exact knowledge of clinical food allergy, controlled conditions of tests, accurate counting, selected interval, equal dispersion of cells, counting of 800 or more cells, interpretation of the "curve" and not the total increase or decrease of the cells, the variations that may exist due to the previous incidence of the food in the diet and finally the phenomenon of antianaphylaxis. There is another point, while occasionally one can clear up a patient's symptoms entirely by means of the digestive leukocyte counts, the majority of the cases will require clinical testing.

CLINICAL TRIAL

The success that Rowe²⁰ has had with his elimination diets is due to the fact that he has used them in light of a clinical knowledge of food allergy. Therefore, one may use his diets, or devise an individual restricted diet to begin manipulation. At the present time I devise

a preliminary diet upon the basis of the leukocyte tests and the history of the diet. The desiratum here is to know what the patient eats, when it is eaten and what, symptoms are produced. In the average patient with strict cooperation, clinical manipulation must be carried out at least three months to establish the desired information. When this work is finished the patient should know all foods to which he is sensitive, the type of symptoms produced and their relative clinical importance.

Dietary records are a necessity and should include the perspective and introspective types. The former is illustrated in Figure I.

HERBERT J. RINKEL, M. D.

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Diet Chart I.
Perspective type of food chart

Perspective type of food chart

This diet chart reveals the variety of foods used and their incidence in the diet and is the means by which one may give a prescribed diet. It may be used alone if the patient is ordinarily free of symptoms three or four days at a time. If symptoms are continuous it should be used in conjunction with the daily diet and symptom records. On this record the foods are merely checked when eaten. No attempt is made to record whether the foods are used once or thrice daily. Compounded foods are separated into their exact ingredients. This chart will furnish information relative to antianaphylaxis; the accumulative factor and the variety of foods in the diet.

DAILY DIET AND SYMPTOM RECORD

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	HOUR	1	2	3	4	5	6	7	8	Other Symptoms	Drugs	Location-Activity	REMARKS							
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	7 to 8 am																			
	8 to 9 am																			
	9 to 10 am																			
LUNCH: Eaten at:	10 to 11 am																			
	11 to 12 am																			
	12 am to 1 pm																			
	1 to 2 pm											-								
	2 to 3 pm																			
Extras:	3 to 4 pm																			
	4 to 5 pm																			
	5 to 6 pm																			
DINNER: Eaten at:	6 to 7 pm																			
	7 to 8 pm																			
	8 to 9 pm																			
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Diet Chart II.

Introspective type of food chart

The daily diet and symptom record may be used to record the exact foods; their preparation and the time of ingestion. Also, the patient may record his activities and whereabouts; the use of drugs and by means of the hourly squares the presence and degree of symptoms. The chart is designed to make use of all of the diagnostic features of the symptomatology, namely, the variation of symptoms from hour to hour, the occurrence of attacks between midnight and morning as well as attacks which occur upon arising. It should always be used in conjunction with diet chart I.

In conjunction with the perspective record one sometimes needs an introspective record, such as illustrated in Figure 2.

12 M to 6 am

This record has been designed to make diagnostic use of all information which a patient may record. The record is kept by placing one, two or three plus marks in the respective time intervals for the different symptoms. The success that may be attained by the use of any diet record is proportional to the patient's cooperation and one's understanding of the symptomatology of food allergy.

Early in this work, the rule was laid down that no clinical trial could be considered conclusive unless the patient had been free of symptoms for at least three days prior to the test. This axiom is still in force.

Clinical diet trial or manipulation of foods is the sole final arbiter in every suspected case of food allergy. Dependence upon any less reliable method is bound to lead to disaster.

Thus, the physician returns to the practice of bedside medicine for his final diagnosis. He manipulates, he tests, he observes and if his work has been done correctly, the patient in almost every instance will corroborate his observations that the food disagrees.

III. THE NATURE OF FOOD ALLERGY WHICH AFFECTS DIAGNOSIS

It is a common experience for a physician to see a patient who has been studied allergically for several months or longer and who because of poor results, or because the game was "too hard", has changed consultants. Invariably the patient will state that he is sensitive to a number of foods, and if you doubt his statements, as most of us do, you will deliberately feed him the foods and find that they do not produce symptoms in many instances.

This experience should not lead one to believe that the patient was never sensitive to the foods incriminated, since it is true that in the great majority of the food sensitizations tolerance is acquired by omission. When one discovers that a patient has developed a tolerance to a food, he should teach the patient how to preserve tolerance and not allow him to destroy it rapidly. Tolerance is determined in direct relation to the incidence of a food in the diet. Incidence being the amount of food taken over a period of time. The ability to maintain tolerance is quite variable in different patients, therefore, precautions should be taken to preserve it.

Another point of clinical importance is the fact that food allergy varies not only in degree but in frequency. Some patients are mildly sensitive to only a few foods, and from this meager beginning it increases in incidence and degree to what I chose to call the total allergic. In this case there are no non-allergic foods; there are no compatible leukocyte curves, with any test food, or if they be obtained, they cannot be maintained when the food is eaten regularly. Thus, one might conceive of the problem of food allergy and in turn the problem of diagnosis, of being that of the very simple monosensitivity to the extreme forms of multisensitivity with no apparent compatible food.

Whether the patient with these findings is in reality sensitive to all foods or whether his degree of allergic upset produces findings that are not specific is a point of considerable interest. In our own experience it has been possible to control about one half of these patients by dietary measures, in fact no other method has been successful in any comparable degree.

The ideal in food diagnosis is this: To know every food that produces allergic symptoms, whether alone or in syngerism. To know for what foods the patient maintains an absolute tolerance. To know for what foods there is partial tolerance and how to maintain this phase of compatibility without absolute elimination. In short, to know the exact clinical effect of every food.

This is as far as a study of food allergy can be carried, since there is no means of desensitization that is satisfactory in a series of patients. Avoidance of the food must be practiced until tolerance is established. The food may then be readmitted to the diet and continued in such incidence as to preserve this immunologic state. Invariably tolerance will be lost and then omission must be practiced again

SUMMARY

- 1. Food allergy exists in most forms of atopic allergy. They have an apparent allergic effect in many clinical disease syndromes not yet admitted to be allergic entities.
- 2. Food is practically always a factor in pollinosis; it is the most common etiologic agent in perennial nasal allergy; it is almost a universal factor in asthma and in this instance it is a more common cause of symptoms in the adult than in the child.
- 3. Food sensitivity in asthma is frequently the sole cause of excessive secretions of mucous.

Before assigning a functional factor to those cases the diagnosis of food allergy must be

- 4. The leukopenic index is a diagnostic measure in the experimental stage. Over 15,000 of these tests have been performed according to my technic in an attempt to evaluate its use. Owing to the many modifying factors upon this test, conclusive information other than the technic is not available at this time.
- 5. The technic of the leukopenic index is given in detail.
- 6. Clinical importance of food trials and additions are discussed. This method is the plan of choice for all diagnostic work, and the final criterion for any laboratory test.
- 7. Food allergy is variable in incidence and degree, it being very limited in certain patients while in others it is multiple and severe. It is the multiplicity of food sensitizations that determines chronicity; it is the degree of sensitivity that determines the severity of symptoms.
- 8. The diagnosis of food allergy is a systematic study which neither assumes that allergy does not exist for a given food nor that food is not a factor in any clinical entity. It accepts as conclusive only those symptoms which can be reproduced at will by specific foods upon purposeful ingestion. With this premise as a guide the exact effect of every food in the diet is determined.

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Dr. Morris Fishbein, Editor of the Journal of the American Medical Association, will be the guest speaker at a meeting of the Topeka Knife and Fork Club, to be held in Topeka on September 20. His subject will be "Medicine and the Changing Social Order".

PNEUMOCOCCUS MENINGITIS WITH COMPLICATIONS: RECOVERY WITH CONTINUOUS SPINAL DRAINAGE

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Topeka, Kansas

Recoveries from the bacterial meningitides are increasing in frequency. Included in this encouraging increment are those cases due to the pneumococcus, a heterogeneous group in which the mechanics of recovery have been most variable; spontaneously¹, by serum therapy^{2, 3}, by subarachnoid drainage^{4, 5}, by chemotherapy and combined methods^{6,7,8}. These references are by no means complete, but are a fair sample of the recent literature and indicate that better results might be obtained in the future. Serum and chemotherapy apparently hold out the most hope. Within the past two months the author saw a case of pneumococcemia and pneumococcus meningitis which followed incision into a retropharangeal abscess in a young woman of twenty years of age. She was treated by the oral administration of para-amino-benzenesulfonamide, and made a complete recovery. Her case is not worthy of more than brief mention because the patient received numerous blood transfusions which were therapeutic factors, possibly detracting from proper evaluation of the effect of the drug.

It is the purpose of this paper to describe a case of pneumococcus meningitis in which so many complications arose after the recovery from the meningitis itself as to warrant detailed account. The patient was a forty-three year old grocer, who had been well all of his life. On September 7, 1936, while watching a ball game he was accidently struck across the bridge of his nose by a ball bat. He did not lose consciousness. He was taken to a hospital immediately and his severe nasal hemorrhage was checked by packing. X-ray revealed that all of his nasal bones were fractured. The next day he complained severely of pain in his nose and had a slight rise in temperature which increased in the next few days to 102.4. On the night of the tenth he vomited and became so uncomfortable that he pulled the packing out of his nose. Several days thereafter he complained of nausea and headaches, but his fever subsided. Throughout this period of time he had a somewhat elevated white count, around 13,500. Ten days after the accident he was well enough to be out of bed, but complained of some weakness. He had irregular temperature variations from 97 to 100 degrees. On the twentieth he had spontaneous, severe epistaxis which was difficult to control. Thereafter he began having some elevation in temperature again. The white count was 16,000 and the haemoglobin had fallen to sixty-eight per cent. On the twenty-second a transfusion of 500 c.c. of blood was given him, and he had an immediate reaction with a chill and temperature of 107.2 degrees. His fever subsided but resumed the next day. It was of the spiking variety reaching 105 almost daily. His right tympanic membrane was found to be red and bulging, and a meryngotomy was performed. A slight amount of sero-purulent discharge was obtained, which was found to be filled with pneumococcus type four. Blood culture was negative. He continued to be very restless. At no time was a leak of cerebro-spinal fluid noted from the nose.

On September twenty-fifth the patient was very listless, vomited, had a temperature of 104.2 degrees. The haemoglobin had gone down to fifty-nine per cent, and the white count had risen to 21,500. It was at this time that neurological consultation was requested by the attending physicians.

Neurological examination that evening revealed a listless, uncooperative individual, somewhat confused and disoriented. During the transient periods of lucidity that the patient had there was a very suggestive expressive aphasia, which was difficult to evaluate because of the confusion present. The patient had a moderate stiffness of the neck and a bilateral Kernig sign. There was a drift of the outstretched right hand inward and downward when he kept his eyes closed. A right hyperreflexia was present and an equivocal right Babinski sign. The ocular fundi were negative. There was some nystagmus on lateral gaze to the right. The tongue deviated to the right.

Lumbar puncture was done immediately, and cloudy cerebro spinal fluid was obtained. It contained 1885 cells, ninety-nine per cent of which were polymorphonuclears. Gram positive encapsulated diplococci were found on smear, which later were shown to be pneumococcus type four.

After the diagnosis of the meningitis was established consideration was given to the possibility that there was a left fronto-temporal lobe brain abscess because of the focal signs, but this did not seem very probable at the time. Therefore, spinal drainage was instituted im-

^{*}The Menninger Clinic, Topeka, Kansas.

mediately. The patient was placed on a Bradford frame, and continuous intravenous injection of 0.375 per cent saline was begun. Over night the patient had a total intake of 1180 c.c. of saline and 300 c.c. of spinal fluid were removed. In the morning the patient's temperature was normal; the cell count was down to 235 white cells; sixty-five red cells were also present. From this time on cultures and smears of the spinal fluid yielded no organisms. The patient was somewhat more rational, and his general condition was much improved.

At one o'clock in the afternoon of the same day the patient had an attack of paroxysmal tachycardia. His pulse rate exceeded 300 per minute. The continuous spinal drainage and the intravenous injections were discontinued and fifty c.c. of fifty per cent glucose was given to the patient intravenously. It was found by pressing on his eyeballs that his pulse rate could be slowed to around 140. As soon as the pressure on the eyeballs was discontinued, however, the tachycardia resumed. Finally, pressure over the region of both carotid sinuses slowed the pulse to 120, terminating the attack. Despite this attack the patient's condition remained good, and he felt no harmful effects except a little anxiety and weakness. The count in the last spinal fluid withdrawn that afternoon was ninety white cells and eighty red cells. At eight o'clock that evening the patient's temperature began rising again. A lumbar puncture was performed; 375 white cells were present in the spinal fluid, and continued spinal drainage was instituted again. By morning, September twenty-seventh, the cell count was down to 100 per cubic millimeter and by two o'clock in the afternoon only fifteen white cells per cubic millimeter were present in the spinal fluid. The spinal drainage and intravenous injections were discontinued. The patient was still a little dull. His neck rigidity and Kernig's sign had completely disappeared. Altogether the patient received in the two days in which continuous spinal drainage was done 5,385 c.c. of 0.375 per cent saline, and 925 c.c. of spinal fluid were recovered.

The next day the patient had an elevation of temperature to 102 degrees and another lumbar puncture was done. Only ten cells per cubic millimeter were present in the spinal fluid, however. Therefore, another source for the patient's destruction of his left mastoid, and the next day a radical mastoidectomy uncovered an extremely destructive process in the left mastoid.

The patient's condition continued to be

poor. A right facial weakness appeared and some indistinctness of the margins of the left disc was present. Great consideration was given to the possibility of a left fronto-temporal lobe abscess. By the next day, September thirtieth, the patient had adopted a hemiplegic attitude; his right arm was definitely weaker, and he had a complete motor aphasia. He seemed about to go into stupor. Therefore, on October first a left fronto-temporal decompression was done. The dura was exposed and found to be extremely tense. As soon as it was opened there was a small gush of clear, colorless cerebrospinal fluid, but the gyri of the brain were not found to be abnormal in any sense. Needling in all directions in the regions of the frontal and temporal lobes revealed no abscess. The small decompression opening was left, and the patient was returned to his room in a rather poor condition. His temperature rose to 105 degrees the next day, and another transfusion was given. After that his right sided pyramidal tract signs began to diminish, and slowly he began to make satisfactory progress. His temperature came down to normal, the weakness on the right side began to disappear, and his aphasia began to clear up. On October sixth a lumbar puncture showed an initial pressure of 120 m.m. of water and only three cells per cubic millimeter were present. From October seventh to twelfth the patient had another rise in temperature due to a further complication which arose in the process of his recovery. The veins of his right arm became inflamed and a very severe thrombo-phlebitis ensued. infection was a very severe one, for at one time his temperature reached 106.2 degrees and the blood culture was positive for pneumococcus type four at that time. Under local application of continuous wet compresses to the right arm, this phlebitic process gradually subsided and his temperature reached normal.

On October sixteenth another lumbar puncture was done. The initial pressure was found to be sixty. Only one cell per cubic millimeter was present in the spinal fluid. A Queckenstedt maneuver showed as prompt a rise when the left jugular was compressed as occurred on the right side. This was done to rule out the possibility of a phlebitic process in the left lateral sinus. Another slight rise in temperature occurred on October twenty-first, for which no cause was found. Three weeks afterward the temperature remained normal, and on November fourteenth the patient left the hospital.

After the patient was at home he had a very

slow period of convalescence which was complicated for one week by a rather severe pitting edema of the right arm and leg, which was much more marked in the arm. This hemiedema subsided with elevation of both arm and leg and has never returned. After two months he was able to resume his work and since then he has been working daily without any difficulty except that now, nine months after he left the hospital he occasionally still tires easily, and when fatigued he finds that he is still a little hesitant in expressing himself.

DISCUSSION

Several points are noteworthy in this case. In the first place, the wandering of the predominant site of the infection is more or less characteristic of the pneumococcus. Here the nose, middle ears, meninges, and brain and vessels were involved. It is still possible that a silent brain abscess is present, for it appears the most likely explanation for the occurrence of the development of quite definite right-sided signs and the aphasia. These might also be explained by the presence of edema possibly aided by the after effects of the intravenous injection or large quantities of hypotonic saline. However, it is doubtful how these could explain the sharply localized nature of the focal lesions. The patient is pleased with the degree of his recovery and does not wish to consider the possibility of air studies. Another point which might be mentioned is that while several complications of continuous spinal drainage have been mentioned in the literature to our knowledge this is the first time that a severe attack of paroxysmal tachycardia has been reported.

SUMMARY

A case of pneumococcemia precipitated by a fracture of the nasal bone with chronic low grade infection in the posterior nares is reported. Possibly by extension from the original site of infection the patient developed bilateral otitis media and a left mastoiditis. He also had a meningitis from which he recovered under continuous spinal drainage. The further course of the patient's treatment was complicated by episodes in which he became aphasic, developed right-sided signs, which subsided after the left frontotemporal decompression. Severe thrombo-phlebitis in the right arm ensued, but it responded to local conservative measures. At a still later period in the patient's slow convalescence a transient episode of hemi-edema occurred.

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USE OF BARBITURATES IN SURGERY MAURICE A. WALKER, M. D.

Kansas City, Kansas

Various recently developed barbital derivatives are efficient hypnotics, act rapidly, and are promptly eliminated from the body without cumulative effects. Administered before operations, they allay apprehension and nervousness and prevent toxic manifestations following injection of procaine hydrochloride. Regional anesthesia may be used for many operations which formerly required a general anesthetic if adequate doses of these barbital compounds are administered first. The following case reports illustrate their use in everyday surgical problems, particularly in children and the aged.

CASE 1

A girl, aged 4, was to receive a transfusion of blood. A capsule containing one and one-half grains of pentobarbital sodium (Nembutal) was given by mouth. After one hour, a needle was placed in a cubital vein and the blood infused without disturbing her slumber.

A boy, aged 7, needed to be circumcised. His mother gave him a capsule containing one and one-half grains of pentobarbital sodium at home before starting to the office for the operation. One hour later, while he was sound asleep, solution of one per cent procaine hydrochloride was infiltrated into the prepuce, and circumcision was performed without difficulty.

CASE 3

A boy, aged 8, injured his right wrist. Because of the "silver fork" deformity, a diagnosis of Colles' fracture seemed obvious. A subsequent roentgenogram showed complete posterior dislocation of the epiphysis of the radius, without any other fracture. A capsule containing one and one-half grains of pentobarbital sodium was administered by mouth when the boy was first seen. After forty minutes, he was sleeping soundly. Solution of two per cent procaine hydrochloride was infiltrated into the tissues at the lower end of the radius without any apparent discomfort. Twenty minutes later, without awakening the patient, the epiphysis was replaced in its normal position without difficulty.

CASE 4

A boy, aged 11, cut the back of his left hand. It was apparent that the extensor tendons of the fourth and fifth fingers were divided. A capsule containing one and one-half grains of pentobarbital sodium was given by mouth. The boy was sound asleep by the time preparations for operation were completed. Solution of one per cent procaine hydrochloride was infiltrated into the edges of the wound and beyond it. Without discomfort to the patient, the incision was lengthened for further exploration. It was found that the tendon of the extensor carpi ulnaris muscle was also partly divided. The boy was awakened and, by voluntary contraction, the proximal ends of the severed tendons were easily identified. The tendons were sutured and the wound closed without complaint of pain.

CASE 5

A frail woman, aged 74, slipped and fell. She suffered a fracture through the anatomical neck of the humerus, with anterior dislocation. and an inter-trochanteric fracture of the femur. When first seen at her home one-fourth grain of morphine sulphate was administered hypodermically, and a capsule containing one and one-half grains of pentobarbital sodium was given orally. One hour later she was sleeping soundly. She did not awaken while she was transported in the back seat of an automobile to the hospital, where roentgenograms were made. Without other anesthetic, the shoulder was manipulated, the dislocation was reduced, and the arm was bandaged against the body. Traction was applied to the leg with adhesive tape. She did not awaken for several hours. Her convalescence was uneventful.

According to the annual report of the Veteran's Administration, 173,817 patients were hospitalized in the year ending June 30, 1937, of whom 168,570 were veterans.

MODERN CONCEPTIONS OF SYPHILIS

J. G. MISSILDINE, M. D., and

J. V. VAN CLEVE, M. D.

Wichita, Kansas

Schaudinn and Hoffman identified the organism of Syphilis in 1905, and placed it among the spirochetes; further study led Schaudinn to abandon this classification and to place it among the treponema, giving it the name "treponema pallidum," being descriptive of one of its distinctive qualities, its unusual resistance to staining with the ordinary anilin dyes. Transmission of the disease to animals preceded the identification of the organism, and was accomplished in 1903 by Metchinikoff and Roux, who innoculated a female chimpanzee on the clitoris, with the successful development of a primary lesion and secondary eruption, thus fulfilling the laws of Koch.

In 1909 Neisser demonstrated that syphilis is a systemic infection, with the treponema present in bone-marrow, spleen and testes within forty-eight hours after innoculation, and many days and even weeks before the first appearance of the chancre itself. Widespread ignorance of Neisser's findings prevailed until 1917 when the clinicians began to accept the early systemic nature of syphilis. Thus, the chancre, accepted by traditional syphilology as the first manifestation of syphilis, is in reality a rather late affair, and only a tardy local reaction at the point of entry of the infection which has become systemic long before its very existence is suspected.

The first step after penetration is an invasion of the perivascular lymphatics, followed by a vascular reaction which assumes the form of endothelial swelling with proliferation and development of an obliterative end-arteritis. The end result of these small disseminated focal reactions is, therefore, degenerative, and replacement of a functionally active parenchymatous tissue by an inert and weakened scar. Warthin has pointed out that the long periods of latency which mark the clinical course of syphilis, in which the patient's physical life presents no evidence of the disease, are the products of a relative immunity, maintained by slow chronic inflammatory changes, especially in the parenchymatous structures, and the vascular system. The chronic inflammatory reaction in the microscopic foci thus described keeps the spirocheta pallida in subjection, and the patient in the clinical state of latency.

When these changes develop in the wall of

the aorta, fibrous tissue replaces elastic tissue and the weakening of the wall leads to the bulge of aneurysm. In small arterioles in strategic locations there follows the damaging effect of hemorrhage from rupture, as in the production of hemiplegia from ruptured aneurysm of the lenticulostriate artery in the internal capsule. Fibrotic replacement of the heart muscle leads to myocardial degeneration, arrhythmias and blocks due to damaged conduction mechanism, or fibrous contraction around the orifices of the coronary arteries with occlusion and sudden death of the patient from myocardial ischemia. Replacement of a sufficient amount of parenchyma in structures such as the liver leads to cirrhosis with its consequence of vascular damage to the portal circulation. Gummatous infiltration has a pathologic architecture differing in degree rather than kind from that of the earlier lesion, the loss of parenchyma being great in proportion to its size, and serious in proportion to its location.

The application of the dark field apparatus to the identification of the spirocheta pallida is credited to Landsteiner and Hoffman, although the instrument itself, in the form of the so-called ultramicroscope had been devised by Liedentopf for the study of the physical constitution of collodial solutions. The principle employed is a surprisingly simple one, essentially that of the mote or dust particle visible in a sunbeam.

In 1901, Wasserman, working independently, first applied the compliment fixation phenomena, previously described by Bordet and Gengou, to the diagnosis of syphilis. Kolmer, in 1922, greatly elaborated and standardized Wasserman's original test. Repetition of the Wasserman test is coming into recognition as one of the most important checks on its accuracy in clinical diagnosis, and also lessens the percentage of technical errors. A diagnosis of syphilis should never be made, therefore, on the basis of a single positive blood Wasserman, unless it is supported by other convincing evidence of the disease.

The earliest application of the spinal fluid examination to the detection of syphilitic involvement of the cerebro-spinal axis, was that of Ravant in 1903, and of Widal and Sicard, which antedated the first performance of the Wasserman test on the fluid by Levaditi and Marie in 1906. One of the most important steps in the rapid popularization of the spinal fluid examination was the demonstration that

syphilitic involvement of the nervous system occurred, not late in the disease, but early, and that the application of the spinal test in the primary, secondary, and latent periods would often reveal a state of affairs of great importance to the patient's future, though not betraved by any symptoms whatever. By 1915 it was conclusively shown that early neurosyphilis could be recognized by spinal fluid examination before the appearance of secondary lesions. Abnormalities of the spinal fluid, often of the most pronounced type, precede by months or even years the first signs that can be elicited by neurologic examination, and the first appearance of symptoms of a subjective type. The fact that the spinal fluid itself may be the sole guide to an otherwise asymptomatic and obscure involvement of the most important group of structures affected by the disease, has justified the insistent demand of syphilologists that the test shall not be an optional part of the management of early and latent syphilis, but an absolutely routine requirement for all cases at the proper time during their course. There can no longer be any reasonable question of the fact that the cerebrospinal fluid in latent syphilis may present absolutely the only evidence of the disease; the Wasserman reaction on the blood remaining persistently negative. It is, moreover, an inescapable fact that the spinal fluid in early treated syphilis may present evidence of severe involvement of the nervous system, especially of the meninges, without any objective clinical evidence of the patient's condition, and without any symptoms which will suggest the real state of affairs to patient or physician until the sudden extension of the process, during a rest interval after treatment, produces that all too familiar neuro-recurrence. Therefore, as a guide to the effect of, and the need for, treatment in both early and late neuro-syphilis, the examination of the cerebro-spinal fluid has become indispensable.

Much of Rabelais' medical practice, like that of other physicians of the day (1494-1553) was among patients with venereal disease. Syphilis was wide spread, even in high society and Rabelais comments upon it through his character Epistemon, describing what he has seen in Hell. "The Pope Sixtus", relates Epistemon, "was a grease of Syphilis". "What?" cries Pantagruel, "do they have Syphilis there?" "Certainly", answers Epistemon. "I don't know how many, but more than a hundred million of them. For, believe you me, those who don't have Syphilis in this world have it in the next".—From Rabelais As A Physician, by Frederick T. vanBeuren, Jr., Bulletin of The New York Academy of Medicine.

DERMATITIS MEDICAMENTOSA*

RICHARD L. SUTTON, JR., M.D., #

Kansas City, Missouri.

Eruptions caused by the injection or ingestion of drugs are seen fairly frequently. Just how frequently is a question of some interest and the following is a brief summary of experience at the University of Kansas Hospital.

Eruptions caused by the external application of medicinal substances, drug eruptions of the

venenata type, are here disregarded.

It is not to be presumed that every instance of drug eruption that occurred appears in the list, for only those could be found by the record clerks which had been written as final diagnoses. Some cases probably were seen, recognized, and let go unrecorded, being often minor complications of major medical problems.

From 1920 to 1937 there were some 40,000 hospitalized individuals. Dermatitis medicamentosa was charted seventeen times. These cases were distributed etiologically as follows:

Arsenical 11
Unknown 4
Barbiturates 1
Picric acid 1

17 in 40,000 = 1 in 2,300

From 1929 to 1937 in the Out Patient Department some 68,000 individuals were seen. Dermatitis medicamentosa was charted thirty-three times:

Arsenical	16
Bromide	4
Iodide	4
Phenolphthalein	3
Mercury	2
Bismuth	2
Quinine	1
Acetanilid	1

33 in 68,000 = 1 in 2,100

For comparison, I examined 4,000 records in private practice. Dermatitis medicamentosa was listed thirteen times:

Arsenical 4
Quinine 3
Picirc acid 2
Phenolphthalein 2
Mercury 1
Bromide 1

13 in 4,000=1 in 310

This comparatively great frequency is probably accounted for by the fact that the 4,000 cases were dermatoses, whereas the majority of the University Hospital cases were primarily of other kinds. But they were all receiving medication. In addition, a dermatologist is continually on the lookout for such eruptions, so that few cases escape his records.

While it is true that almost every drug may provoke dermatitis medicamentosa in the rare and idiosyncratic individual, and that cases due to almost every drug may be found reported in the literature, nevertheless the actual occurrence of a drug rash is comparatively rare.

Taken by and large, those due to the arsphenamines are in the considerable majority. Of fifty cases, twenty-seven were due to These are of greatest practical importance, for they are severe, even fatal, are associated with great discomfort and prolonged duration, and are easiest to prevent. If small doses are given, and if earliest symptoms are recognized, severe cases simply do not occur. If itching of the palms, a mottled rash at the flexures of the elbows, a macular erythema over the trunk, or erythema and swelling of the face are not merely asked about but positively looked for each time before administration of the dose of "neo", distressing after-effects will become rarities. And if this Utopian situation were to prevail, the major portion of the practical problem of dermatitis medicamentosa would be solved.

SUMMARY

- 1. A review of the records of the University of Kansas Hospital shows that the frequency of incidence of dermatitis medicamentosa has been of the order of one in 2,000 patients, hospitalized and ambulatory.
- 2. Dermatitis medicamentosa is not a commonplace condition.
- 3. Of fifty cases of drug eruption recorded, twenty-seven were due to arsenicals.
- 4. Arsenical dermatitis is by far the most consequential of all drug eruptions in frequency of occurrence, severity, and duration of symptoms.
- 5. The large majority of arsenical intoxications are preventable merely by the use of care and discretion at each occasion of the giving of treatment. A major portion of the entire practical problem of dermatitis medicamentosa is mainly controllable.
- 6. When in doubt about an arsenical rash, do not give more arsenic.

^{*}Statistics of Incidence at the University of Kansas Hospital. †Instructor in Dermatology.

PRESIDENT'S PAGE

To the Members of The Kansas Medical Society:

I know that all of you have been informed of the address made by Senator James Hamilton Lewis, at his own request, before the House of Delegates at the A. M. A. meeting in Atlantic City, and that you recall his statement that he planned to introduce a bill regimenting the medical profession just as definitely as soldiers are regimented in time of war. On July 28, he introduced S. J. Resolution No. 188 which was read twice and referred to the Committee on Finance of which Senator Pat Harrison is chairman. A copy of this resolution appears in the August issue of this Journal on page 345, and a discussion of the bill is in the August 7 number of the Journal of the A. M. A., page 436.

It looks now as if a special session of Congress may be called this fall; at any rate, when Congress again convenes Senator Lewis will undoubtedly try to force the bill out of the Committee to the floor. The bill is so undemocratic and drastic it seems to me that it will not pass the Finance Committee without some definite change. However, it might. In the event that it does come before Congress I am sure that the officers of every state society will use every possible means to prevent its passage.

I would advise any member of our Society who has contact with representatives or senators to discuss this bill in detail with them. I feel certain the bill would be defeated if the legislators fully comprehended its purport.

J. F. Gsell, M.D., President.

EDITORIAL

BLIND ASSISTANCE

Elsewhere in this issue is published a description of the procedure for medical examination of blind persons who desire to receive assistance under the federal and state social security acts.

A careful reading of this plan will demonstrate beyond a doubt the scientific and practical accuracy of the program adopted. Blind persons in Kansas will be assured free choice of physician within the specialty devoted to this field. They will also be privileged to discuss their cases confidentially in the privacy of their physician's offices rather than being required to subject themselves to the hurried and unsatisfactory system of mass examination. Physicians will find it possible to handle this work in conjunction with their usual practice, rather than being required to operate under conditions wherein best practice cannot be offered. A state ophthalmologist of recognized ability has been provided for administrative purposes and medical questions may thereby be decided by this physician and the examining physician.

It is our belief that all Kansas physicians will appreciate on behalf of their blind patients the excellent program which the Kansas State Board of Public Welfare, Mr. Bruce Church, Director, and Mr. Lester Wickliffe, Assistant Director, have developed in this connection.

DR. C. H. EWING

As most members of the Society know, Dr. C. H. Ewing, of Larned, recently retired from the Board of Medical Examination and Registration. He had been a member of the Board since 1929 and had served as its secretary during most of his term.

Dr. Ewing contributed many things to the continued progress Kansas has made in medical licensure. Among these was the extension of reciprocity agreements to the place where Kansas licensees are now eligible for admittance to al-

most every state; the improvement of rules and regulations governing Kansas licensure; the publication of an annual roster of Kansas physicians; and sponsorship of the Kansas annual re-registration act, which has provided the Board with funds to aid in the enforcement of Kansas healing laws. In addition to this, he will always be remembered for the almost full time service he devoted to the long and difficult litigation with John R. Brinkley.

We extend to him the appreciation of Kansas medicine for the excellent service he gave.

POLIOMYELITIS

The current season of poliomyelitis in Kansas again finds the practitioner in a state of confusion concerning the disease. That this confusion originates from the lack of unanimity of opinion amongst the scientists devoting a great deal of their time to this particular field was emphasized by Toomey in the August 7 issue of the Journal of the American Medical Association. The threatened epidemic which has assumed serious proportions in neighboring states and which may yet reach an alarming stage in Kansas has but emphasized how infantile paralysis conscious is the general public. Despite the fact that few children contract poliomyelitis, of these, few develop massive paralysis and still fewer die, so feared is the disease that any method of prophylaxis or treatment, whether of value or not, quickly gains a large following. It is unfortunate that newly reported scientific work, often preliminary in nature, may first reach the attention of the profession in general and the public through the medium of a news dispatch or a woman's household journal. In all fairness it must be said that seldom do the men reporting their preliminary studies sanction such unwarranted and often inaccurate publicity.

In recent years a great deal of experimental attention has been focused upon the olfactory area as a normal portal of entry for the poliomyelitis virus, but the question remains controversial. Macocus Rhesus monkeys, relatively

quite susceptible to intra-nasal innoculation with the virus, have been protected by severing the olfactory nerves. This suggested that alternate in the permeability of the olfactory mucosa in the nose might lead to protection. A new hope has emerged with the work of Armstrong and Harrison, Oletsky and his associates, Schultz and Gebhardt, which indicates that certain harmless chemicals applied to the olfactory mucosa of monkeys may afford protection against intra-nasal innoculation of the virus for several weeks. Various substances have been used successfully in experimental animals among which are alum, tannic acid, picric acid and zinc sulphate. Whether such experimental work can be successfully applied to human beings is as yet an unproved fact. That this evidence is sufficient to warrant an extensive clinical trial cannot be denied, but the experience which Massachusetts has had with the use of convalesent serum amply illustrates the difficulty of securing large adequately controlled experimental groups from which accurate conclusions may be drawn.

The wisdom of the public health departments—both state and national, in openly backing the general use of the zinc sulphate spray while still in its experimental stage will be questioned by many. A widespread use of the spray in Kansas this fall will unlikely furnish helpful evidence as to its effectiveness. For the practitioner, in the face of an epidemic, the use of the spray is certainly justifiable, but only if its experimental nature is recognized.

The present status of convalescent serum in the treatment of acute pre-paralytic poliomyelitis is undetermined, although there seem to be few ardent supporters of its virtues. Many early workers in convalescent serum, such as Kramer and Aycock have refuted their earlier claims. While it is a well-established fact that naturally acquired active immunity to polimyelitis is closely associated with the development of humoral antibodies, it is not clear just how important a role these antibodies play in the recovery from the disease or the later refractory state. Recent experiments have shown quite

conclusively that convalesent serum even in large doses cannot protect against animal innoculations by the intra-nasal route. It has been suggested that the presence of antibodies in the blood merely represents a by-product of the interaction of virus and susceptible nerve cell. Though of doubtful virtue in the pre-paralytic stage of the disease, convalesent serum is undoubtedly useless once paralysis has developed.

TUBERCULOSIS ABSTRACTS

A review for physicians prepared monthly by the National Tuberculosis Association and published through the co-operation of the Kansas Tuberculosis and Health Association and The Kansas Medical Society.

DIFFERENTIAL DIAGNOSIS IN PULMONARY DISEASE

Cough, sputum, hemoptysis, dyspnea, together with slight or marked constitutional manifestations, indicate abnormality of the respiratory tract. First and foremost suspicion points toward pulmonary tuberculosis. This should always be so but it in no wise removes the need for careful differential diagnosis. Among the chief alternative possibilities are bronchietasis, pulmonary abscess, pulmonary abscess, pulmonary fibrosis, neoplasms, mycotic disease, spirochetosis, occupational diseases (silicosis, asbestosis, anthracosis) and pulmonary syphilis.

Four factors play a leading part in increasing the accuracy of present diagnostic procedure. They are as follows:

- 1. A far better appreciation and interpretation of x-ray findings, dependent upon (a) vastly improved technique in the taking of films; (b) the result of experience in reading films, together with the information given at the necropsy table.
- 2. Bronchoscopy, which yields wonderful results in skilled hands.
- 3. Lipiodol injections, which map out lung areas hitherto a trackless wilderness to the clinician.
- 4. More exact methods of sputum examination and culture, resulting in the recognition of formerly unsuspected sources of chronic pulmonary infection.

The existence of these modern aids in no wise lessens the importance of a carefully taken history of the case. In the great majority of instances this in itself will enable the skilled observer to reach a tentative diagnosis which turns out to be correct. It must not be confused with the erroneous procedure of making a

"snap diagnosis," but is based on a thorough knowledge of the causes of pulmonary disease and their different manner of development.

Two categorical principles may be laid down which if adhered to will render faulty diagnosis rare. The first is that rales in the lower lobes may be considered non-tuberculous until proved otherwise, while physical signs in the apices suggest overwhelmingly a tuberculous origin. The second is that if a patient has a moderate or considerable amount of thick, yellow, yellowish-green or green sputum found to be negative for tubercle bacilli on repeated examination, the probabilities are all against the presence of tuberculosis. Such axioms are of course diagnostic aids, not dogma.

In differentiating bronchiectasis the difficulty does not lie with the established cases.—those with 250 to 500 c.c. of sputum in twentyfour hours which separates into the typical three layers, the absence of tubercle bacilli, the basal physical signs, the relatively slight constitutional manifestations, the x-ray findings, particularly when reinforced by lipiodol injections. It is the earlier or milder cases which cause confusion when cough and sputum are not predominant, when physical signs are scant or absent and when no characteristic finger clubbing exists. It must of course be remembered that the two conditions may coexist. When this occurs discovery of tuberculosis is usually not difficult. For example, in the rare cases where bronchiectasis is found in the upper lobes it is usually associated with tuberculosis. Given, therefore, a condition of long standing with chronic cough and sputum, the latter negative for tubercle bacilli, with relatively few constitutional symptoms, the verdict should be bronchiectasis rather than tuberculosis.

Too many cases of lung abscess are erroneously diagnosed as tuberculosis. The differentiation should not be difficult and here the history is of special value. Sixty-six per cent of lung abscesses develop after either surgical procedures or pneumonia. The onset is usually very acute and the patient is exceedingly ill.

The physical signs of pulmonary abscess are wholly without characterization. The x-ray picture is also protean. Diagnosis is essentially based on previous history, acuteness of onset, signs and x-ray evidence, wherever they may be, a constant leukocytosis and, finally, the liberation of a varying amount of foul-smelling pus when the abscess ruptures into a bronchus.

Acute pulmonary fibrosis (in distinction from chronic, such as silicosis, etc.) has attracted recent attention, four cases having been reported recently from Johns Hopkins Hospital, all fatal. X-ray findings resemble those of tuberculosis though they are usually more generalized throughout the lung. There is progressive fibrosis with profuse exudation as well, dyspnea and cardio-respiratory failure. There is reason to believe that this condition may be of more frequent occurrence than has been recognized and it is well to bear it in mind.

Primary pulmonary carcinoma is practically always bronchogenic. When we come to deal with metastatic pulmonary malignancy, the diagnosis rests upon respiratory symptoms superimposed upon a known cancerous base.

The main symptoms of pulmonary malignancy are pain, dyspnea, x-ray findings of an heterogeneous nature with rapid spread, added to which there is the constantly increasing cachexia characteristic of malignant disease wherever situated. Most characteristic is a dyspnea out of all proportion to the anatomical damage as revealed by physical examination or x-ray. Again, the often volumnious sputum is relatively benign in appearance, and, of course, persistently negative for tubercle bacilli. Physical signs are practically of no diagnostic value. All obscure cases, particularly those with lesions of the lower lobes, with more or less indefinite symptoms and negative sputum, should be bronchoscoped and lipiodol films made before subjecting the patient to a long and tedious period of observation.

Brief reference only need be made to the remaining pulmonary diseases mentioned as conditions frequently diagnosed tuberculosis. In mycotic disease the x-ray and physical signs may be practically identical with those found in true infection with tubercle, but the persistently negative sputum is a great argument against tuberculosis. In the case of aspergillosis, for example, the finding of the characteristic fungus when the sputum is cultured on Sanbouraud's medium will clinch the diagnosis. The same general truths hold true for spirochetosis and the diagnosis hinges not so much on clinical features as on accurate laboratory examinations. The possible presence of these diseases should always be kept in mind especially as their appropriate treatment is wholly different from that instituted in tuberculosis.

In the case of the chronic fibroses, silicosis. asbestosis and anthracosis, it is upon the history

that we must place our main reliance in differential diagnosis. Pulmonary syphilis is a very rare condition. Its possibility must be kept in mind and knowledge of the Wassermann reaction in doubtful cases is desirable, but it is not one of the diagnostic differentiations that need give primary concern.

In conclusion it is well to keep in mind the following thirteen special points in the differential diagnosis of pulmonary tuberculosis. Dogmatism in medical diagnosis is risky but it seems safe to emphasize these basic requirements.

- 1. Pulmonary tuberculosis must constantly be kept in the foreground.
- 2. Good stereoscopic x-ray films are essential in diagnosis.
- 3. Failure to examine sputum is equal to mal-
- 4. Failure to find tubercle bacilli after repeated attempts is a great argument against the presence of tuberculosis.
- 5. In all children under twelve and in all uncertain adult cases an intradermal tuberculin test should be done. Lots of adults will react negatively and that throws out tuberculosis.
- 6. A carefully taken history is of great importance. It need not be long. Quality is always above quantity. Do not leave this to an assistant. Do it yourself.
- 7. Resort promptly to bronchoscopy and lung mapping in all doubtful cases that are really ill.
- 8. Remember that persistent absence of tubercle bacilli from sputum merely excludes tuberculosis. The patient is not a bit better than before. Continue to search the sputum for some definite cause of infection.
- 9. The ravages of bronchiectasis are almost never like those of tuberculosis unless they coexist and then tuberculosis is the primary disease to be treated.
- 10. Hemoptysis is not pathognomonic of tuberculosis.
- 11. An extremely acute postoperative pulmonary symptomatology should direct the diagnostic finger toward abscess.
- 12. Fibrotic conditions arise in the presence of chronic sinusitis and other chronic infections elsewhere in the body. There may be acute fibrotic pulmonary conditions. Think of them.
- 13. Pulmonary malignancy is on the increase. In the primary type bronchoscopy is invariably diagnostically. In the metastatic type the diagnosis is of scientific interest only.

Differential Diagnosis in Pulmonary Diseases, Paul H. Ringer, A.B., M.D., F.A.C.P., New York State Journal of Medicine, June 1, 1937.

Eighteen of the cities of Kansas have adopted the Public Health Service Milk Ordinance.—Kansas State Board of Health News Letter, July 1937.

MEDICAL ECONOMICS

Edited by O. W. Davidson, M.D. of the Medical Economics Committee

AID TO THE BLIND

The Kansas State Board of Social Welfare announced under date of August 24, the following procedure for the handling of blind assistance under the Socialy Security Act:

To: All All Eye Or Eye, Ear, Nose, And Throat Doctors Of Medicine State Of Kansas

As you know, plans are now being completed by the Federal Social Security Act and the Kansas Social Welfare Act to provide monetary assistance to blind persons who are in need of aid. A large portion of this program is obviously dependent upon medical information, and thus after conferences with The Kansas Medical Society, the Kansas Social Welfare Board has approved the following procedure for the handling of the medical phases of the program.

1. State Supervising Ophthalmologist.

An official state supervising ophthalmologist, Clifford J. Mullen, M.D., with headquarters at 801 Harrison, Topeka, Kansas, has been appointed, who will serve in an advisory capacity for the administration of medical blind problems under the Kansas Social Welfare Act. The State Supervising Ophthalmologist is expected to assist physicians in the handling of eye examinations in any way possible. He will not participate in the preliminary examination of the applicants.

2. Application for Assistance.

Any blind person sixteen years of age or more who is a resident of the State of Kansas and in need of public assistance may make application to the county welfare board of his county after which an investigation will be made as to whether the applicant is actually in need of financial aid. If the economic status of the applicant makes him eligible for blind assistance, an authorization form for eye examination will be filled out and the applicant will present himself for examination to his chosen qualified examiner.

3. Examiners of the Eye.

Requirement is made under the regulations of the Federal Social Security Board that all eye examinations of blind applicants shall be furnished by doctors of medicine who limit their practice to eye or eye, ear, nose, and throat. Hence, the Kansas Social Welfare Board has designated as official examiners, all doctors of medicine who strictly limit their work to eye, or eye, ear, nose, and throat, and who reside and are duly licensed in the State of Kansas. It is the intention of the Board that every Kansas physician within this classification shall remain upon the list of official examiners so long as his record is satisfactory. A list of qualified examiners has been forwarded to the local county welfare officers.

An appeal is made to you men for your cooperation in obtaining the highest type of examination, and a complete report, so that fair and just decisions may be rendered to those eligible for blind assistance.

It is further stipulated that the applicant shall have a

free choice of examiners to the fullest extent possible. In counties where more than one qualified examiner resides, the applicants will be furnished with the names of all examiners in their county and directed to make their own choice. In the counties where no examiner resides, the applicants will be required to make a choice among the examiners most accessible to their location. The State Board of Social Welfare of Kansas is particularly anxious that this privilege and the personal relation between the patient and physician shall be made available to each and every applicant, and it intends to see that this ruling is strictly enforced.

Fees payable to the authorized examiners are as follows: Examination, \$5.00; Consultation, \$5.00; and Reexamination, \$5.00, which amounts were approved on the basis of recommendations made by The Kansas Medical Society. The applicant under no consideration should be expected to pay the examination fee or cost. These fees will be paid by the State Board of Social Welfare.

Instructions to be followed by examiners in the handling of applications and in receiving payment are as follows:

- a. Examinations are to be recorded on the medical form as designated by the Social Welfare Board. These are to be in duplicate and typewritten, and immediately upon completion, together with the authorization form for the payment of fees, are to be mailed direct to the state supervising ophthalmologist, 801 Harrison, Topeka, Kansas. (Important: The examiners' authority to make an examination is strictly dependent upon receipt of a properly executed authorization form, and this from a qualified examiner will entitle him to the examination fee paid by the State.)
- b. Reexaminations and consultations will be authorized by the state supervising ophthalmologist in accordance with recommendations made by the examiner and when circumstances indicate. However, fee payments therefor cannot be approved except upon advance authorization by the State Supervising Ophthalmologist. The medical reports of these reexaminations or consultations, along with the authorization blank for examination by the examiner, when completed should be immediately returned to the state supervising ophthalmologist, 801 Harrison, Topeka, Kansas.
 - 4. Type of Examination.
- a. Whenever possible applicants should be examined in the doctor's private office during his routine work where all necessary instruments for this examination are available. Every question on the examiner's report must be completely answered. The more thorough are our records, the better job we will be able to do. You will note at the bottom of the report under "Remarks (When should applicant be reexamined)", remarks also should include the cooperation of the applicant and the opinion of the examiner as to the rehabilitation of this individual. By rehabilitation we mean whether or not we can train this individual for one of the many works outlined for partially blind people. If available space is not present on the regular examiner's form, this office will greatly appreciate the examiner's further remarks on a separate sheet of paper securely attached to the original form.

b. Reports that are not thorough in their findings will be returned to the examiner to be completed, and this will be without additional fee. The questions on the form are self-explanatory to qualified examiners.

- c. Promptness in making examinations, filling out reports and mailing direct to the State Supervising Ophthalmologist, 801 Harrison, Topeka, Kansas, is requested.
- d. Fundi examinations must be made through the dilated pupil, except in suspected glaucoma.
- e. The examiner must be on his guard for the malinger. By far the greater proportion of applicants will be cooperative, but the examiner should be familiar with the various methods of detecting malingers. This information is desired and should be included in remarks at the bottom of the report.
- f. The examiner should feel free to correspond with the State Supervising Ophthalmologist for any information pertaining to the above. Likewise, any suggestions or constructive criticisms would be gratefully received.
- 5. A field secretary, Miss Elizabeth Snyder, has been appointed to assist the State Supervising Ophthalmologist in the performance of his duties. Miss Snyder is a registered nurse, graduate of a Grade A Hospital, having four years of work in social service. She will no doubt contact the examiners personally at times. Consideration shown and assistance given her will be appreciated.
 - 6. Concluding remarks.

This bulletin of instructions is mailed to all physicians in Kansas that they may familiarize themselves with the Act covering blind assistance, those qualifications necessary for the examiner, and further that they may instruct any of their patients in the proper procedure for blind assistance. A tentative list of qualified examiners is available at your local county welfare office. Please consult.

The cooperation of the medical profession is earnestly requested in this endeavor. The State Board of Social Welfare has given every possible assistance toward a thorough program and desires an efficient and successful operation thereof.

Yours verý truly. C. J. Mullen. M.D., State Supervising Ophthalmologist.

Approved:

R. B. Church, State Director.

* * *

To: Local County Welfare Boards

Under Section 8a of the Social Welfare Act in the State of Kansas, blind assistance is given to blind residents of Kansas, age sixteen years or over, who are in need of public assistance.

It becomes the duty of the State Board of Social Welfare to institute a plan that this Act might be properly executed. A State Supervising Ophthalmologist, Clifford J. Mullen, M.D., has been appointed.

The following plan is hereby outlined by the State Board of Social Welfare to determine those eligible under this Act.

First, cooperation and assistance is asked of those individuals associated with this work in order that a rapid process of determining eligibility by eye examination may be had. The local county Social Welfare office has designated that office as a place where those requesting blind assistance may make application. The local county welfare director will determine the need of

the applicant for public assistance. If eligible for public assistance, the county director then instructs the individual to pretent himself to a local eye or eye, ear, nose, and throat coctor of medicine for an examination of his eyes. In the counties in which an examiner does not reside, the examiner most easily accessible should be used. The applicant who is to have eye examination will be provided with a Form Number 117 to present to the eye examiner and which is the authorization for his eye examination.

The State Board of Social Welfare of Kansas has designated that the examiners of these eye conditions for blind assistance must be eye, or eye, ear, nose and throat doctors of medicine, who strictly limit themselves to this specialty, reside in the State of Kansas and are properly licensed in the State. These individuals in the following course of instructions will be known as the examiners. A tentative list of the qualified examiners in the State of Kansas is enclosed with these instructions.

Further, a free choice of the qualified examiner is the privilege of the applicant, so that in counties where more than one examiner resides there must be no influence in any manner or means offered by anyone to the applicant for any particular examiner, but a list of the available examiners must be submitted to the applicant for his choice. There are very definite advantages in this procedure. First, the traveling expenses of the applicant to the examiner, which are borne by the county, should be kept to a minimum. Second, in communities that have a qualified examiner, one should not be discriminated against by appointment of another from adjacent communities or in his own community.

The State Board of Social Welfare of Kansas has secured the services of a nurse to assist the state supervising ophthalmologist in the performance of required duties. Miss Elizabeth Snyder has been so retained.

Under no condition must an applicant present himself or herself for examination without first having been declared eligible for public assistance by the local county welfare office and the proper authorization Form Number 117 to the examiner filled out. The medical examiner will immediately forward the completed medical form of the applicant, form P.A.-701, typed in duplicate and mailed directly to the state supervising ophthalmologist. 801 Harrison, Topeka, Kansas. Further, it is the duty of the local county welfare director to immediately notify the state supervising ophthalmologist, 801 Harrison, Topeka, Kansas, by letter, when the applicant is declared eligible for medical examination, and if known, mention the name of the examiner. This will assist the State Welfare office in keeping proper and active record of the applicants.

Any information pertaining to the examination of the eyes should be addressed to Clifford J. Mullen, M.D., State Supervising Ophthmologist, 801 Harrison, Topeka, Kansas; while that pertaining to subsistence assistance should be addressed to the State Division of Social Welfare, 801 Harrison, Topeka, Kansas.

Very truly yours,

R. B. Church, State Director.

The tentative list of examiners which intends to include all doctors of medicine in the

state limiting their work to eye, or eye, ear, nose and throat, is as follows:

R. F. Campbell, M.D., Iola.

O. L. Cox, M.D., Iola.

E. J. Bribach, M.D., Atchison.

F. I. Stuart, M.D., Atchison.

John D. Hunter, M.D., Fort Scott.

M. E. Jarrett, M.D., Fort Scott.

E. I. Davies, M.D., Clay Center.

C. D. Kosar, M.D., Concordia.

E. N. Robertson, M.D., Concordia.

Ellis Starr, M.D., Concordia.

R. L. Ferguson, M.D., Arkansas City. Charles Moran, M.D., Arkansas City.

Walton H. Rea, M.D., Arkansas City.

C. D. Ralls, M.D., Winfield.

F. M. Wilmer, M.D., Winfield.

C. M. Gibson, M.D., Pittsburg.

H. L. Steele, M.D., Pittsburg.

R. B. Hutchinson, M.D., Lawrence.

Lyle S. Powell, M.D., Lawrence.

B. Anderson, M.D., Victoria.

H. R. Bryan, M.D., Hays.

O. A. Hennerich, M.D., Hays Anna M. Wenzel, M.D., Hays.

J. G. Janney, M.D., Dodge City.

C. L. Williams, M.D., Dodge City.

P. R. Young, M.D., Ottawa.

J. N. Enns. M.D., Newton.

Edwin Harms, M.D., Newton.

Louis Slatin, M.D., Newton.

E. E. Peterson, M.D., Halstead.

T. D. Blasdel, M.D., Parsons.

G. A. Landes, M.D., Parsons. H. C. Markham, M.D., Parsons.

G. W. Smith, M.D., Leavenworth.

P. A. Webster, M.D., Leavenworth.

M. T. Capps, M.D., Emporia.

W. B. Granger, M.D., Emporia.

C. S. Trimble, M.D., Emporia.

D. P. Trimble, M.D., Emporia.

A. M. Lohrentz, M.D., McPherson.

J. B. Chadwick, M.D., Coffeyville.

C. A. Thomas, M.D., Coffeyville.

M. L. White, M.D., Coffeyville.

T. E. Smith, M.D., Independence.

W. S. Youngs, M.D., Independence.

C. W. Cole, M.D., Norton.

B. L. Greever, M.D., Hutchinson.

W. O. Quiring, M.D., Hutchinson.

H. L. Scales, M.D., Hutchinson.

Wm. M. Scales, M.D., Hutchinson.

J. H. Schrant, M.D., Hutchinson.

H. D. Sterrett, M.D., Hutchinson.

H. M. Stewart, M.D., Hutchinson.

G. E. Stone, M.D., Hutchinson.

C. D. Armstrong, M.D., Salina.

Wm. Armstrong, M.D., Salina.

Ned Cheney, M.D., Salina.

E. G. Ganoung, M.D., Salina.

Perry Lloyd, M.D., Salina.

M. J. Brown, M.D., Salina.

J. C. Brown, M.D., Wichita.

M. E. Brownell, M.D., Wichita. E. D. Carter, M.D., Wichita.

W. G. Gillett, M.D., Wichita. J. W. Cheney, M.D., Wichita. J. F. Gsell, M.D., Wichita. George Gsell, M.D., Wichita. R. O. Howard, M.D., Wichita. E. W. Johnson, M.D., Wichita. D. L. Maggard, M.D., Wichita. H. E. Marshall, M.D., Wichita. C. A. Parker, M.D., Wichita. J. S. Reifsneider, M.D., Wichita. G. A. Spray, M.D., Wichita. E. E. Tippin, M.D., Wichita. T. W. Weaver, M.D., Wichita. Charles Woodhouse, M.D., Wichita. G. V. Allen, M.D., Topeka. B. J. Ashley, M.D., Topeka. F. C. Boggs, M.D., Topeka. W. K. Hobart, M.D., Topeka. H. L. Kirkpatrick, M.D., Topeka. H. W. Powers, M.D., Topeka. W. W. Reed, M.D., Topeka. S. A. Fuhring, M.D., Wellington. L. H. Sarchet, M.D., Wellington. J. A. Billingsley, M.D., Kansas City. C. E. Hassig, M.D., Kansas City. C. J. Lidikay, M.D., Kansas City. C. J. Mullen, M.D., Kansas City. J. N. Sherman, M.D., Chanute. W. B. Pittman, M.D., Pratt. Milton Morrow, M.D., Great Bend.

* * *

E. C. Button, M.D., Great Bend.

Addition will also be made of all eye, or eye, ear, nose and throat specialists who move into the state or who may have been inadvertently omitted.

Although the procedure issued to date includes only medical examination for the purpose of certification, it is believed that treatment assistance for blind persons may be available at a later date.

The program was developed in close cooperation with the Society and is believed to present a particularly practical method from a scientific standpoint.

MEDICINE IN JAPAN

The following article depicting medical conditions in Japan has been prepared upon invitation of this section by Dr. L. Grant Balding, of Manhattan, who recently returned from several months of postgraduate study in that country. It is believed that the description will be of interest to all physicians.

The Imperial University is located in Kyoto, the ancient capital of Japan. The medical school here, among the leaders in Japan, is a mammoth institution comprising buildings of twenty years ago with the most

modern. The school has government backing.

As one arrives at the hospital there is a covered vestibule where one removes his shoes, replacing them with sandals or heavy socks. I felt rather foolish in ankle-high, red-knit woolen socks that I had borrowed from Bishop Nichols, of the Kyoto diocese, who acted as my interpreter.

Lacking a business calling card, I showed my 1936 Kansas Medical Society card, Masonic, Elks, Kiwanis, Phi Chi, and Kansas driver's license to the girl at the desk. She took them, left for a conference and returned in a few minutes bringing an attendant. The Bishop asked for the return of my credentials, but she said they were to be kept on file. We compromised by writing my name, address, age, and occupation on a form paper, and my cards were returned. Business cards are practically essential in the Orient.

The attendant preceded us through one building before entering the new eye, ear, nose and throat building. We could see wards and private rooms, most of them filled with patients. Rates varied from six to thirty yen. (A yen in Japan has a purchasing power similar to the dollar in America. Outside Japan the yen is very unstable.) This rate includes meals, room and medical attention, and must be paid in advance. In each room there are the usual furnishings as in an American hospital, and in addition there is an offset enclosed for the patient's attendant, usually a servant or friend. A nurse is extra, the attendant working under the supervision of a floor nurse. The wealthier of course, have private nurses. The attendant's meals and requirements are not included in the regular rate. Some rooms have private baths, but most do not.

A bath in Japan is something to remember. Their tubs are more like pools, three or four times the size of our tubs, and the water is very, very hot. The Japanese stand up in the tub and wash from a small pan of lukewarm soft water, soaping themselves well, then lie down in the large tub to soak for an hour or so. The hot water invariably raises the body temperature to 103 or 104 degrees. Some go barefooted in winter after these baths, not minding the cold. Sanitation in Japan is a fetish and even the poorest are bath conscious.

At the Imperial University there is a charity ward which resembles Cook County in Chicago. These patients get less care, but perhaps adequate. Orange peels and papers are strewn all over the floor until an attendant sweeps them up.

This practice is not confined to hospitals; trains and public buildings also are littered with trash as in our public parks following picnic outings.

Histories, as a rule, are written in German, some English and occasionally Japanese. Until the World War German was the scientific language, when they changed to English. Again it is German and the Swastika flies from many buildings. For me, most of the charts were blanks and I did not write any histories. The graduate students become assistants, the students and interns doing nothing but observe. All were exceptionally courteous to me allowing me full run of the place, but not allowing me to scrub for any operations. (Only Japanese doctors are allowed to operate in Japan; white surgeons may operate under their guidance as an assistant.)

The nurses are socially not well thought of, poorly paid, and really slovenly in appearance. True, an unstarched cheap muslin uniform and a yellow skin might be perfectly clean, but to me it seems hard to compare them with our spotless trained nurses.

Professor Teijo Hoshimo is the chief of the ear, nose, and throat department. Since my stay was limited, it was necessary to confine my interests to one department. Hoshimo has studied in Chicago, Berlin, Upsala, and Vienna. In 1918 he was in Chicago under Shambaugh. I was one of the very few Americans to whom he had spoken since that time. Needless to say his English was little better than my Japanese. He mixed a few languages together and I attempted the same with modest success. His special interest is the labyrinth. Perhaps his assistance to Barany of Upsala, an authority on vestibular physiology and pathology, is the cause of this. He told me of a labyrinthine window operation for otosclerosis. I asked him how his results compared with other methods to which he answered, "Favorably; they are all of doubtful value".

Hoshimo does not remove many tonsils. On tonsillectomized Japanese returning from California he has a great chance for comparison, and notes that the lateral pharyngeal walls are hypertrophied with so often a poor result. A great many adults have an "adenoid expression", but this has been considered racial. My own opinion is that this so-called racial characteristic will vanish when they do tonsillectomies and adenoidectomies as in America.

Only the universities can afford, x-rays, the one at the Imperial Medical School having cost twelve thousand yen. It is of Japanese manufacture, but appears unusually like an American machine. All sorts of lenses, microscopes, etc., are copied. (The Japanese will copy a good foreign item so closely as to print even the serial number of the original, and have no respect for patent rights. We all remember reading of Japanese products sent to this country with the NRA label on them. A very interesting story is told of a Japanese judge deciding an infringement suit for Black and White Whiskey, a very excellent British product. The learned judge decided in favor of the defendants with these words of wisdom, "An imitation is a product like the original. Inasmuch as the bottle and lebel are identical with the original, one would admit the grounds for the suit, but since the whiskey is vastly different, there is no imitation".)

Experimental work is constantly carried on: One is working on the reaction of the vegative system to stimuli of the mucous membrane of the nose, another on vocal chords, three or four on the labyrinth, one on streptococcus mucosus infection of the ears and sinuses which has a high mortality, many are working on the pathology department which occupies a building unto itself. This will give an idea of what to expect from Japanese medicine in a few years.

Since Japan is so overcrowded, preventive medicine is most stressed, and indeed a few, Kitasato, Noguchi, etc. have made their mark and as one may notice chiefly in bacteriology.

To get a doctor's degree requires three years of premedic, four years of medicine, an assistancy or interneship followed by a comprehensive examination. which sounds considerably like our own requirements. The student must, however, read and write German, for as I mentioned before, histories are written in that language.

As a postgraduate institution, the pathology and bacteriology departments are probably very satisfactory, especially the latter. For ear, nose and throat, although

I enjoyed a brief stay, I had the feeling that they are behind us. In a few years, however, with returning students from all over the world, the Japanese seem certain to arrive.

NEWS NOTES

POLIOMYELITIS

Cases of poliomyelitis which have been reported in Kansas during the past few months have been as follows: June—two, July—twenty, August—fifty-four, September (week ending September, 4) fourteen. Although the increase in the number of recent cases over those early in the season has been great, the Kansas State Board of Health does not feel that the disease will reach epidemic proportions in Kansas, even with the peak probably to be reached in September.

For the treatment of respiratory cases there is at present only one respirator in Kansas which is located at Stormont Hospital in Topeka. The central office of the Society, however, will be glad to provide emergency night and day service in attempting to locate other available and accessible respirators. (day phone 2-0241, Topeka; night phone 3-1798, Topeka).

COMMITTEE MEETINGS

Dr. J. F. Gsell, President, held a special meeting of all committee chairmen in Wichita on September 5. Committee programs for next year were discussed and detailed projects were assigned to each committee.

A meeting of the Committee on Control of Tuberculosis was held in Topeka on September 6. Discussion was given at the meeting to further coordination of a Kansas tuberculosis program between the Society, the Kansas Tuberculosis and Health Association, the Kansas State Board of Health and the State Sanatorium at Norton.

A meeting of the Committee on Conservation of Eyes sight is to he held in Lawrence on September 13. Dr. Louis H. Carris, Managing Director of the National Society for Prevention of Blindness, will attend and plans are to be prepared for a medical blind prevention program under the Social Security Act.

ATTORNEYS

In accordance with a recommendation approved by the Society Executive Committee, Mr. Kirke W. Dale, of Arkansas City, and Mr. Harry Fisher, of Fort Soctt, were recently appointed as associate counsel for the Society in the present pending osteopathic litigation.

The attorneys participating in these cases are therefore as follows: For the Board of Medical Examination and Registration—Mr. Clarence V. Beck, Topeka, Attorney General, and Mr. Theo. F. Varner, Topeka. Assistant Attorney General; for the Society—Harlan and Johnston. Manhattan. Faulconer, Dale and Swarts, Arkansas City, and Mr. Harry Fisher, Fort Scott; and for the osteopaths—Mr. Will J. Vernon, Larned, and Smith, Hatcher and McFarland, Topeka.

Information has also been received from the Bureau of Legal Medicine of the American Medical Association that since the Kansas litigation on this subject will affect twelve states, the Board of Trustees of the Association is considering the advisability of including its attorneys in the action. The Association has been invited to participate if they care to do so.

DR. GEORGE H. SIMMONS

Dr. George H. Simmons, Editor and General Manager Emeritus of The Journal of the American Medical Association, died in Chicago on September 1. Dr. Simmons was born in Moreton, England, January 2, 1853. He came to the United States in 1870, received his M. D. degree from the Hahnemann Medical College, Chicago, in 1882 and was awarded the M. D. degree by Rush Medical College, following additional study, in 1892. In 1899, he was chosen as General Secretary for the American Medical Association and Editor of the Journal. He filled the position of Secretary until 1911, and served as Editor until 1924. After his retirement he traveled extensively for several years. Since that time he has resided in Florida, but has spent some time every other year in Great Britain, and in the intervening years in Chicago.

An interesting story of the life and professional career of Dr. Simmons appears on page 807 of the September 4 issue of the Journal of the American Medical Association.

SOCIAL MEDICINE

All members will be interested in knowing that Senator J. Hamilton Lewis' Resolution No. 188 on indigent medical care still remained in committee at the time Congress adjourned.

Senator Arthur Capper's bill on health insurance also occupied the same position.

However, congressional procedure decrees that bills in the first session of a particular Congress are not annulled by adjournment and thus both of these measures will be pending at either a special session called or at the next regular session.

BLIND PREVENTION

An invitation has been received from the Kansas Society for Prevention of Blindness for all physicians to participate in a series of meetings which are to be held at the following dates and places in the state:

Lawrence	September 13
Topeka	September 14
Wichita	September 15, 16
Independence	September 17
-	September 18
C	September 20, 21

The main speaker at the meetings will be Dr. Louis H. Carris, Managing Director of the National Society for Prevention of Blindness. New York City, and the subjects to be discussed will pertain to the prevention and cure of blindness under the Social Security Act.

The meetings will be of particular interest to all eye, or eye, ear, nose and throat physicians.

POSTGRADUATE ENROLLMENT

The total enrollment (representing twenty-one counties) for the series of Social Security postgraduate courses in pediatrics and obstetrics, sponsored in Northeast Kansas from August 9 to September 3, by the Kansas State Board of Health and the Society Committee on Maternal and Child Welfare, was as follows:

	4 Meetings Attendance		
	Afternoons	Evenings	Enrollment
Topeka	123	110	60
Manhattan	61	72	29
Marysville	48	62	22
Hiawatha	28	26	12
Atchison	56	62	28
Total	316	336	154

Mimeographed copies of the lectures given on pediatrics are available and may be secured by writing Dr. H. R. Ross, Director of Division of Maternal and Child Welfare, Kansas State Board of Health, Topeka.

FALL CLINICAL CONFERENCE OF THE KANSAS CITY SOUTHWEST CLINICAL SOCIETY

The officers of the Kansas City Southwest Clinical Society have assembled an excellent program for the Fall Conference, October 4 thru 7. In addition to a large number of American guests and members of the Clinical Society of Greater Kansas City, the program will be honored by two foreign distinguished guests.

Sir George Lenthal Cheatle of London, England, who is spending a sabbatical year in the United States, will give two addresses upon subjects for which he is well known universally. His excellent volume, "Tumors of the Breast" has revolutionized the classification of breast tumors and aided greatly in the treatment of them. One of his addresses will be on "Paget's Disease of the Nipple." It was on this subject that he published a voluminous monograph prior to the appearance of his work on tumors of the breast in general. Sir George Lenthal Cheatle is a Fellow of the Royal College of Surgeons, England.

Dr. Alfred E. Barclay, a radiologist, is to be the other honored foreign guest. At present, he is Research Professor of Physiology at Nuffield Institute for Medical Research, Oxford. He was formerly a lecturer upon Medical Radiology and Electrology at the University of Cambridge and is a past-president of the British Roentgen Society and the British Institute of Radiology. Dr. Barclay is the author of several books, including "The Stomach and the Oesophagus"; "Normal Mechanism of Swallowing", and "The Digestive Tract: A Radiological Study".

The program for the four days will be most intensive—the afternoon sessions will be devoted exclusively to distinguished guests and two sectional sessions will be

held each morning in which members of the Clinical Society of Greater Kansas City and distinguished guests will participate. The speakers, as well as their subjects, have been carefully chosen and guests will find it to be most inviting and instructive.

LEAVES OF ABSENCE

Dr. Clifton Hall, Topeka, and Dr. Richard F. Boyd, Topeka, have been granted leaves of absence from their duties with the Kansas State Board of Health to enroll in postgraduate work at the Harvard University School of Medicine. Dr. Hall will spend a year in study of tuberculosis problems of public health and Dr. Boyd will take one semester's work in public health administration.

INTERNATIONAL MEDICAL ASSEMBLY

The International Assembly of the Inter-State Post-graduate Medical Association of North America, under the presidency of Dr. John F. Erdmann of New York, will be held in the beautiful new public auditorium of St. Louis, Missouri, October 18, 19, 20, 21 and 22, with pre-assembly clinics on Saturday, October 16 and post-assembly clinics, Saturday October 23 in the hospitals of St. Louis.

The aim of the program committee, with Dr. George Crile as chairman, is to provide for the medical profession of North America an intensive postgraduate course covering the various branches of medical science. The program has been carefully arranged to meet the demands of the general practitioner, as well as the specialist. Extreme care has been given in the selection of the contributors and the subjects of their contributions.

The St. Louis Medical Society will be host to the Assembly and has arranged an excellent list of committees who will function throughout the Assembly.

A tentative list of the distinguished teachers and clinicians who will take part on the program may be found on page IV of the advertising section of this lournal

A most hearty invitation is extended to all members of the profession who are in good standing in their State or Provincial Societies to be present. A registration fee of \$5.00 will admit each member to all the scientific and clinical sessions.

For further information, write Dr. W. B. Peck. Managing-Director, Freeport, Illinois.

OPTOMETRY

The August issue of Reader's Digest contains the first of a series of articles entitled "Optometry On Trial". The second article in this series will be in the October issue of the same magazine, while the September copy reproduces some interesting correspondence which the first article provoked. It is believed that these features will be of interest to all members of the medical profession.

STATE BOARD OF HEALTH

Representatives of the Kansas State Board of Health spoke at eighty-seven county teachers' institutes on the

subject "The Teacher's Responsibility in the Promotion of Health of the School Child". Physician speakers were: Dr. Clifton Hall, Dr. Richard Boyd, Dr. R. H. Riedel, Dr. John S. Fulton, and Dr. H. R. Ross.

Ten exhibits have been arranged by the Kansas State Board of Health at the Kansas Free Fair, Topeka, to be held during the week of September 13.

FEDERAL CANCER SUBSIDY

President Roosevelt recently signed a measure passed by Congress wherein the federal government will subsidize investigations of the cause, prevention and cure of cancer. The law as passed is reproduced below for the information of members:

AN ACT

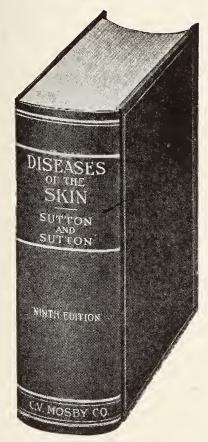
To provide for, foster and aid in coordinating research relating to cancer: to establish the National Cancer Institute; and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That for the purposes of conducting researches, investigations, experiments, and studies relating to the cause, diagnosis, and treatment of cancer; asssiting and fostering similar research activities by other agencies, public and private; and promoting the coordination of all such researches and activities and the useful application of their results, with a view to the development and prompt widespread use of the most effective methods of prevention, diagnosis, and treatment of concer, there is hereby established in the Public Health Service a division which shall be known as the National Cancer Institute (hereinafter referred to as the "Institute").

- SEC. 2. The Surgeon General of the Public Health Service (hereinafter referred to as the "Surgeon General") is authorized and directed for the purposes of this Act and subject to its provisions, through the Institute and in cooperation with the National Cancer Advisory Council hereinafter established—
- (a) To conduct, assist, and foster researches. investigations, experiments, and studies relating to the cause, prevention, and methods of diagnosis and treatment of concer;
- (b) To promote the coordination of researches conducted by the Institute and similar researches conducted by other agencies, organizations. and individuals;
- (c) To procure, use, and lend radium as hereinafter provided;
- (d) To provide training and instruction in technical matters relating to the diagnosis and treatment of cancer;
- (e) To provide fellowships in the Institute from funds appropriated or donated for such purpose;
- (f) To secure for the Institute consultation services and advice of cancer experts from the United States and abroad; and
- (g) To cooperate with State health agencies in the prevention, control, and eradication of cancer.
 - SEC. 3. There is hereby created the National

The Ninth Edition of the Standard Text on Dermatology— Eighteen Years of Outstanding Service to the Medical Profession of America.

SUTTON'S DISEASES OF THE SKIN



WHAT THE CRITICS SAY:

Journal American Medical Assn.—

"The excellence of the work is revealed by a careful examination of its contents."

The Lancet (London)—

"Probably the most complete and trustworthy work of reference on its subject in the English language, and is worthy of a place on the shelves of every practicing dermatologist."

British Journal of Dermatology-

"The type and general make-up of the book are admirable, and we have no doubt of its continued success."

U. S. Naval Medical Bulletin-

"This is one of the best written and most handsomely illustrated manuals on dermatology in print. The skin lesions of gangosa, verruca peruana, oriental sore, leprosy frambesa, and other tropcal skin lesions are given more extensive treatment than is commonly the case in American works on dermatology."

Virginia Medical Monthly—

"Every practitioner needs in his library a standard work on dermotology. To the specialist this book is particularly desirable because of the bibliography which is appended to each subject. Its field of usefulness is tremendously wide. Its illustrations and the idealism of the publisher, as expressed in the technique of printing, make it a very desirable book."

Minnesota Medicine-

"Sutton's volume on dermatology which first appeared in 1916 has been accepted as one of the best standard texts on the subject. The present volume is a large volume of 1,433 pages, and is especially valuable on account of the abundance and excellence of the photographs."

Southern Medical Journal-

"The commanding place of this work among the standard texts in English on skin diseases is made even more secure by this fine edition."

Archives of Dermatology and Syphilis-

"It is encyclopedic and scholarly. It has the spirit of an enthusiastic devotee of a specialty, and it has the vigor and piquant spirit that are Sutton. There is no need to advise dermatologists or other physicians that it should be on their shelves. They have already decided that for themselves, and in one edition or another it is found everywhere."

1433 pages, with more than 1310 illustrations in the text, and 11 color plates. Ninth

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By Richard L. Sutton, M.D., Sc.D., LL.D., F.R.S. (Edin.), Professor of Dermatology, University of Kansas School of Medicine, and Richard L. Sutton, Jr., A.M., M.D., L.R.C.P. (Edin) Instructor in Dermatology, University of Kansas School of Medicine.

The C. V. Mosby Company—Publishers—3523 Pine Blvd.—St. Louis, U. S. A.

Advisory Cancer Council (herein referred to as the "Council"), to consist of six members to be appointed by the Surgeon General with the approval of the Secretary of the Treasury, and of the Surgeon General, exofficio, who shall be chairman of the Council. The six appointed members shall be selected from leading medical or scientific authorities who are outstanding in the study, diagnosis, or treatment of cancer in the United States. Each appointed member shall hold office for a term of three years, except that (1) any member appointed to fill a vacancy occurring prior to the expiration of the term for which his predecessor was appointed shall be appointed for the remainder of such term, and (2) the terms of office of the members first taking office shall expire, as designated by the Surgeon General at the time of appointment, two at the end of the first year, two at the end of the second year, and two at the end of the third year after the date of the first meeting of the Council. No appointed member shall be eligible to serve continuously for more than three years but shall be eligible for reappointment if he has not served as a member of the Council at any time within twelve months immediately preceding his reappointment. Each appointed member shall receive compensation at the rate of \$25 per day during the time spent in attending meetings of the Council and for the time devoted to official business of the Council under this Act, and actual nad necessary traveling and subsistence expenses while away from his place of residence upon official business under this Act.

SEC. 4. The Council is authorized—

- (a) To review research projects or programs submitted to or initiated by it relating to the study of the cause, prevention, or methods of diagnosis and treatment of cancer, and certify approval to the Surgeon General for prosecution under section 2 (a) hereof any such projects which it believes show promise of making valuable contributions to human knowledge with respect to the cause, prevention, or methods of diagnosis and treatment of cancer;
- (b) To collect information as to studies which are being carried on in the United States or any other country as to the cause, prevention, and methods of diagnosis and treatment of cancer, by correspondence or by personal investigation of such studies, and with the approval of the Surgeon General make available such information through the appropriate publications for the benefit of health agencies and organizations (public or private), physicians, or any other scientists, and for the information of the general public;
- (c) To review applications from any university, hospital, laboratory, or other institution, whether public or private, or from individuals, for grants-in-aid for research projects relating to cancer, and certify to the Surgeon General its approval of grants-in-aid in the cases of such projects which show promise of making valuable contributions to human knowledge with respect to the cause, prevention, or methods of diagnosis or treatment of cancer;
- (d) To recommend to the Secretary of the Treasury for acceptance conditional gifts pursuant to section 6; and
 - (e) To make recommendations to the Surgeon

General with respect to carrying out the provisions of this Act.

- SEC. 5. In carrying out the provisions of section 2 the Surgeon General is authorized—
- (a) With the approval of the Secretary of the Treasury, to purchase radium, from time to time, without regard to section 3709 of the Revised Statutes; to make such radium available for use in carrying out the purposes of this Act; and, for such consideration and subject to such conditions as the Secretary of the Treasury shall prescribe, to lend such radium to institutions, now existing or hereafter established in the United States for the study of the cause, prevention, or methods of diagnosis or treatment of cancer, or for the treatmen of cancer;
- (b) To provide the necessary facilities where training and instruction may be given in all technical matters relating to diagnosis and treatment of cancer to such persons as in the opinion of the Surgeon General have proper technical training and shall be designated by him for training or instruction; such persons while receiving training or instruction may, with the approval of the Surgeon General, receive a per-diem allowance to be fixed by the Surgeon General but not to exceed \$10;
- (c) To establish and maintain, with the approval of the Secretary of the Treasury, research fellowships in the Institute with such stipends or allowances (including traveling and subsistence expenses) as the Surgeon General may deem necessary to procure the assistance of the most brilliant and promising research fellows from the United Sttaes or abroad;
- (d) To secure for the Institute, from time to time and for such periods as may be advisable, the assistance and advice of experts, scholars, and consultants from the United States or abroad who are learned and experienced in the problems involved in accomplishing the purposes of this Act;
- (e) To make grants in aid for research projects certified by the Council pursuant to section 4 (c);
- (f) To adopt, upon recommendation of the Council and with the approval of the Secretary of the Treasury, such additional means as the Surgeon General may deem necessary or appropriate to carry out the provisions of sections 1 and 2 of this Act.
- SEC. 6. The Secretary of the Treasury is authorized to accept on behalf of the United States gifts made unconditionally by will or otherwise for study, investigation, or research into the cause, prevention, and methods of diagnosis and treatment of cancer, or for the acquisition of grounds or for the erection, equipment, and maintenance of premises, buildings, and equipment for the Institute. Conditional gifts may be accepted by the Secretary if recommended by the Surgeon General and the Council. Any such gifts, if in money, shall be held in trusts and shall be invested by the Secretary of the Treasury in securities of the United States, and the principal or income thereof shall be expended by the Surgeon General, with the approval of the Secretary of the Treasury, for the purpose prescribed by this Act, subject to the same examination and audit as provided for appropriations

One of a series of advertisements prepared and published by PARKE, DAVIS & CO. in behalf of the medical profession.

This "See Your Doctor" campaign is running in the Saturday Evening Post and other leading magazines.



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"Our Baby will have every advantage."

Of course. But are affection, the determination to give children "every advantage," parental devotion, enough?

No, frankly they are not. The two pairs of hands of even the most conscientious parents are not enough to guide a child safely past the hazards that confront her. The little body hasn't yet built up a very sturdy resistance against many of the disease-producing germs we all encounter every day of our lives. She is susceptible to a whole group of illnesses that are visited almost solely upon children—the so-called "diseases of child-

hood." Her diet, her hours of rest, her health habits—all have an important bearing on her future.

That is why two pairs of parental hands are not enough. A third parent should be added to the family circle. That third parent is ... the doctor.

To be sure, you are quick to get in touch with the doctor when your child is ill. But isn't the youngster really entitled to more than that? Shouldn't she see the family doctor often enough to regard him not as a stranger but as a friend? And shouldn't he know about her previous illnesses and be familiar with her little whims and how to get around them? Then, too, the doctor should have the opportunity of giving her full benefit of modern preventive medicine—consultations about her growth and development, and protection against such diseases as smallpox, diphtheria, and whooping cough.

He, too, should have hold of her little hand, guiding her along the road of health that is every child's right.

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The World's Largest Makers of Pharmaceutical and Biological Products made for the Public Health Service by Congress. Donations of \$500,000 or over in aid of research under this Act shall be acknowledged permanently by the establishment within the Institute of suitable memorials to the donors.

- SEC. 7. (a) There is hereby authorized to be appropriated a sum not to exceed \$750,000 for the erection and equipment of a suitable and adequate building and facilities for the use of the Institute in carrying out the provisions of this Act. The Secretary of the Treasury is authorized to acquire, by purchase, condemnation, donation, or otherwise, a suitable and adequate site or sites in or near the District of Columbia for such building and facilities, and to erect thereon, furnish, and equip such buildings and facilities when funds are made available.
- (b) There is hereby authorized to be appropriated the sum of \$700,000 for each fiscal year, beginning with the fiscal year ending June 30, 1938, for the purpose of carrying out the provisions of this Act (except subsection (a) hereof). Sums appropriated pursuant to this subsection may be expended in the District of Columbia for personal services, stenographic recording and translating services, by contract if deemed necessary, without regard to section 3709 of the Revised Statutes; traveling expenses (including the expenses of attendance at meetings when specifically authorized by the Surgeon General); rental, supplies and equipment, purchase and exchange of medical books. books of reference, directories, periodicals, newspapers, and press clippings; purchase, operation, and maintenance of motor-propelled passengercarrying vehicles; printing and binding (in addition to that otherwise provided by law); and for all other necessary expenses in carrying out the provisions of this Act.
- SEC. 8. (a) There is hereby authorized to be appointed in the Public Health Service, in accordance with applicable law, such commissioned officers as may be necessary to aid in carrying out the provisions of this Act.
- (b) This Act shall not be construed as superseding or limiting (1) the functions, under any other Act, of the Public Health Service or any other agency of the United States relating to the study of the prevention, diagnosis, and treatment of cancer; or (2) the expenditure of money therefor.
- (c) The Surgeon General with its approval of the Secretary of the Treasury is authorized to make such rules and regulations as may be necessary to carry out the provisions of this Act.
- (d) The Surgeon General shall include in his annual report for transmission to Congress a full report of the administration of this Act, including a detailed statement of receipts and disbursements.
- (e) This Act shall take effect thirty days after the date of its enactment.
- (f) This Act may be cited as the "National Cancer Institute Act". Approved, August 5, 1937.

ANNOUNCEMENTS

The Twenty-second Annual Session of the American College of Physicians will be held in New York City, with headquarters at the Waldorf-Astoria Hotel, April 4-8, 1938. Dr. James H. Means, of Boston, is President of the College, and will have charge of the program of general scientific sessions. Dr. James Alex. Miller, of New York City, has been appointed General Chairman of the Sessions, and will be in charge of the program of clinics and demonstrations in the hospitals and medical schools and of the program of Round Table Discussions to be conducted at headquarters.

Once more, during the coming fall, winter and spring, the Voices of Medicine will salute the people of America, with the toast "Your Health". This is the well-known title of the radio program of the American Medical Association and the National Broadcasting Company. The coming season will be the fifth; the first two years were devoted to health talks, and the last two seasons to dramatized health messages. This year, the salutation will be addressed particularly to the teachers and students in the Junior and Senior high schools, in the hope that the program will be helpful in illustrating, amplifying, and enriching the health teaching in those schools. The program will be on the air while schools are is session. so that the program may be utilized directly in the thousands of schools which now have or soon will have radio and public address systems reaching the class-rooms. Programs will be announced in advance in HYGEIA, The Health Magazine. While the program is planned especially for high schools, it will not sacrifice the interest which it has held for listeners in the home. To teachers, students and stay-at-homes, the American Medical Association and the National Broadcasting Company will address their message of health education with the familiar musical theme Hale and Hearty, written especially for the program, and the toast, "To America's Schools, Your Health!"

The next examinations of the American Board of Obstetrics and Gynecology (written and review of case histories) for Group B candidates will be held in various cities of the United States and Canada on Saturday, November 6, 1937, and Saturday, February 6, 1938. Application for admission to these examinations must be filed on an official application form in the office of the Secretary at least sixty days prior to these dates.

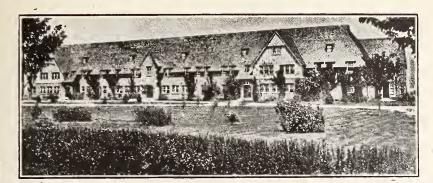
The general oral, clinical and pathological examinations for all candidates (Group A and B) will be conducted by the entire Board, meeting in San Francisco. California, on June 13, and 14, 1938, immediately prior to the meeting of the American Medical Association.

Application for admission to Group A examinations must be on file in the Secretary's Office before April 1, 1938.

For future information and application blanks address Dr. Paul Titus, Secretary, 1015 Highland Building, Pittsburg. (6) Pa.

The National Safety Council Congress will meet in Kansas City, Missouri, from October 11 to 15, 1937. Forty different phases of safety council work will be discussed and members of the Kansas medical profession are especially invited to attend. For further information address A. Morris Ginsberg, M.D., Professional Building. Kansas City, Missouri.

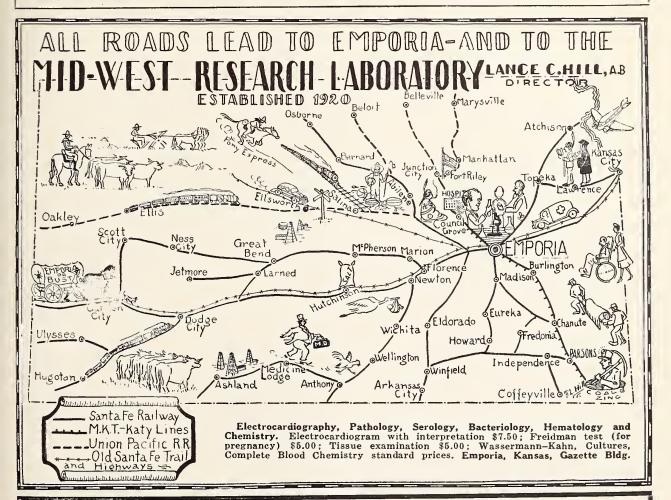
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COUNTY SOCIETIES

The physicians of Barber County met July 21 in Medicine Lodge to organize a county medical society. Election of officers was held as follows: Dr. J. D. Warrick, Kiowa, president; Dr. K. R. Grigsby, Medicine Lodge, secretary; Dr. J. M. Gacusana, Sharon, treasurer; and Dr. H. Yasuda, Hardtner, member of the board of censors. Other doctors in attendance were: Dr. J. E. Hammer, Kiowa; Dr. W. S. Crouch, Hazleton; Dr. G. L. Cody, Sawyer; and Dr. Hardin Gilbert, Medicine Lodge. The society plans to hold monthly meetings in various towns of the county.

The Butler County Medical Society, in cooperation with the Butler County Board of Health and other civic organizations, held a series of pre-school health conferences at several towns in the county during the latter part of July and the first part of August. Dr. L. F. Steffen, County Health Officer, conducted the conferences, and was assisted at each place by the local physicians.

A meeting of the Douglas County Medical Society was held in Lawrence on September 2.

Members of the Greenwood County M. D.'s Society for Indigent Care gathered in Eureka on September 8 for a dinner meeting. Dr. C. H. Warfield, Wichita, discussed pulmonary conditions with x-ray demonstrations. The county commissioners, the county poor commissioner, and local dentists and druggists were guests.

The problem of indigent medical care was the subject of discussion at a dinner meeting of the Saline County Medical Society held in Salina on August 12. Main speakers were Dr. F. L. Loveland, Topeka; Dr. Porter Brown, Salina, Dr. G. E. Kassebaum, Eldorado, and Dr. Andrew P. Brown, Osborne. Members attended from McPherson, Marion, Harvey, Reno and Saline counties.

The Eleventh Annual Golf Tournament of the Sedgwick County Medical Society will be held at the Wichita Country Club on September 24. Tournament play will begin in the afternoon. The match will be eighteen holes. A banquet will follow in the evening. Members from other counties are cordially invited to attend.

The Sedgwick County Society contributed ninety-five dollars to the Penny Ice Fund through sale of tickets to the third annual show sponsored for this purpose by the Salvation Army and the Wichita Beacon.

Dr. Henry N. Tihen, of Wichita, presented an illustrated lecture on "Etiology, Pathogenesis and Treatment of Pneumonia", at a meeting of the Shawnee County Medical Society held in Topeka on September 6.

Dr. H. R. Wahl, Dean of the University of Kansas School of Medicine, led a pathological conference at a meeting of the Wyandotte County Medical Society held in Kansas City on September 7. Other speakers and their subjects were: Dr. M. A. Walker, "Washing Machine Injuries", with discussion by Dr. H. L. Regier and Dr. L. E. Growney; Dr. C. J. Mullen, "External Diseases of the Eye", with discussion by Dr. J. A. Billingsley and Dr. C. E. Hassig. The annual Wyandotte Medical Society handicap golf tournament began the first week in September, with subsequent matches to be played weekly to a termination about October 1, following which the annual banquet will be given at Victory Hills. The annual Wyandotte and Jackson County golf tourna-

ment and dinner were held at Milburn Country Club, Kansas City, Missouri, on September 9.

MEMBERS

Dr. W. B. Beach, of Delphos, reports that in the last twelve consecutive confinements in his practice the offsprings were all females. He wishes to know if other practitioners have had similar records and invites correspondence.

Dr. Clinton Beasley, Bonner Springs, an honorary member of the Society, retired in July after fifty-five years in practice, the last twenty-one of which have been at his present location.

Dr. Edmer Beebe, Olathe, has recently acquired and redecorated a five room residence wherein his office will be located in the future.

Dr. J. D. Clark, Wichita, returned August 10 from a trip to Europe. Dr. Clark was a delegate to the convention of Rotary International held this summer in Nice, France.

Dr. H. L. Collins, Beloit, has been awarded a one year Commonwealth fellowship in Columbia University Postgraduate School of Medicine. Dr. Collins will leave Beloit during the latter part of September for New York City, where he will commence his studies on October 1. Dr. Charles H. Isbell, Jr., Kansas City, Missouri, will occupy Dr. Collins' office during his absence.

Dr. Guy E. Finkle, has moved from Canton to Mc-Pherson, where he will be associated with Dr. C. R. Lytle.

Dr. A. E. Gardner, Wichita, presented an illustrated lecture on "Social Diseases" before members of the Wichita Civitan Club on August 17.

Dr. A. E. Hiebert, formerly of Topeka. has established an office in the Brown Building at Wichita. where he will specialize in surgery.

Dr. L. Gilbert Little, formerly of Hutchinson, has opened offices in the Schweiter Building, Wichita, where he will practice as a specialist in nervous and mental diseases.

The August 1937 issue of Southwestern Medicine contains an article on "Functional Cardio-Vascular Disorders: 'Cardiac Neuroses'", by Dr. William C. Menninger, Topeka. Dr. Menninger is on the program of the Ninety-Sixth Anniversary Meeting of the State Medical Society of Wisconsin, to be held in Milwaukee from September 15 to 17. His subject will be "Suggestions in the Care of the Chronic Insane".

Dr. F. P. Riley, St. Marys, has recently moved his offices into a new suite. Two of the rooms will be equipped for emergency hospitalization.

A paper on "Spontaneous Perforation of the Wall of the Chest by an Aspirated Foreign Body", written by Dr. Ernest M. Seydell, Wichita, was published in the August 1937 issue of Archives of Otolaryngology.

Dr. E. Trekell, Wellington, has been appointed as county physician and county health officer for Sumner County.

When acidosis accompanies anesthesia and toxicity follows surgical trauma

Their effects may be moderated by the administration of Karo before and after operation

When carbohydrates are indicated, surgeons prepare patients pre-operatively to prevent acidosis and post-operatively to protect nutrition. Karo serves this dual purpose. Given with a soft

diet before operation the patient will better resist surgical acidosis. And Karo forced with fluids after operation provides vital energy the patient craves.

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★ Infant feeding practice is primarily the concern of the physician, therefore, Karo for infant feeding is advertised to the Medical Profession exclusively.

The National Board of Medical Examiners recently announced the appointment of Dr. H. Yasuda, Hardtner, as a Diplomate of the Board.

Newly appointed county health officers include: Dr. J. E. Attwood, La Crosse, Rush County; and Dr. Marlin W. Carlson, Ellinwood, Barton County.

Twenty-three physicians from Kansas were registered at the first Rocky Mountain Medical Conference, held in Denver from July 19 to 21.

DEATH NOTICES

Dr. Carl McLain Vermillion, 40 years of age, died August 12 in a Pratt hospital. He was born April 7, 1897 at New Cambria, Kansas, attended college at the University of Kansas, and received his degree of doctor of medicine from Tulane University School of Medicine in 1925. For six years following his graduation he practiced in Minneapolis, moving from there to Pratt, where he practiced until the time of his death. Dr. Vermillion was a World War veteran and a member of Pratt County Medical Society. He is survived by a physician father and two physician brothers—C. D. Vermillion, Tescott, D. D. Vermillion, Goodland, and E. L. Vermillion, Salina, all of whom are members of The Kansas Medical Society.

Dr. Roland Hall Shippey, 63 years of age, died July 30, in a Wichita hospital. Dr. Shippey was born near Galesburg, Illinois, and received his pre-medical education at Knox College, Galesburg. He took his medical degree at the Denver and Gross College of Medicine in Denver, Colorado, in 1903, and served his internship at the Denver and Rio Grande hospital at Salida, Colorado. Dr. Shippey moved to Kansas in 1904, establishing practice at Climax. The following year he moved to Peck, and in 1918 to Wichita, where he had continued his professional career until he became ill in June. He was a member of the Sedgwick County Medical Society.

Dr. John Austin Woodmansee, 53 years of age, died July 28, at the Newman Memorial County Hospital in Emporia. Dr. Woodmansee had practiced medicine in Emporia for thirteen years. He was graduated from the University Medical College, of Kansas City, Missouri, in 1912, and then practiced for some time in Dunlap. He went to California in 1923, where he took special work in pediatrics at the University of California. He established his office in Emporia in 1924, where he specialized in pediatrics. At the time of his death Dr. Woodmansee was chief of staff of St. Mary's Hospital, a member of the staff of Newman Memorial County Hospital, and a member of Lyon County Medical Society.

BOOK REVIEWS

Thomas J. Parran, M.D., Surgeon General of the United States—Shadow On the Land—Syphilis. Published by Reynal & Hitchcock, Inc., New York, New York, at \$2.50 per copy.

After reading much of the propaganda of various authors on syphilis control, Dr. Parran's book "Shadow on the Land" is as refreshing and exhilarating as seeing Tilden play a tennis match after a summer of watching

the amateurs knocking the ball back and forth not only in the court but all over the park. Dr. Parran is no amateur syphilologist. The disease is almost an obsession of our Surgeon General but withal the good doctor as usual keeps his poise in discussing his favorite hunting evil spirit. There is none of the ranting, raving ballyhoo of a beaurocrat trying to make his job seem important. There is not the sob sister appeal of the uplifter. There is not the blare of the amateur publicity "expert". Lewd or crude chapter headings such as seen in some recent publications which almost put them in the pulp magazine class are not used to attract attention.

Dr. Parran's is in truth a simple, straight forward story of syphilis. When read by a physician it is easy to tell that it was written by a physician. Even the average layman may recognize that here are the true. understandable facts about syphilis. It might be well if some decree could be enforced adopting this book as the syphilis "bible" of the nation and forbidding the publication of distorted gross exaggerations and passionate appeals of some of our amateurs. The cause of syphilis control would be much less impeded.

Nowhere does Dr. Parran dodge the truth, either by purposeful omission or circuitous phraselogy. For example, few articles for popular reading have mentioned that even a few people who have syphilis are cured spontaneously without any medical attention as does Dr. Parran. Previous errors in estimates of prevalence or incidence are openly discussed even though such errors might remain hidden and be forgotten, instead of being

not as serious as heretofore believed.

Generalities are few. Anecdotes and incidents enliven the story but are used only where they definitely illustrate some point.

misinterpreted by some as admission that the problem is

Yes, it is only the simple, straight forward story of syphilis, short but crammed with facts and authoritative

statements, yet easy to read.

After being bombarded with propaganda about syphilis. much of which has been purposely or innocently distorted, for the past eighteen months, it would be well for all of us to go back to the man who stirred up anew the whole problem and clarify our ideas for a new start. There is very little new material in the book. It is mostly a gathering together of the story of syphilis as expressed previously in various papers, magazine articles, and speeches. But this condensation of Dr. Parran's ideas and experiences into an excellent, orderly arrangement gives us an opportunity to better understand the problem and, what is more, the physician who is leading the fight against syphilis, one of man's most important disease enemies.

Robert H. Riedel, M.D.

CARMICHAEL, F. A. and CHAPMAN, JOHN: A Guide to Psychiatric Nursing. Philadelphia, Lea and Febiger, 1936.

This brief psychiatric text for nurses written by two of our own Kansas men originated as a set of lecture notes for the nurses in the Osawatomie State Hospital. With encouragement, the authors were persuaded to put it in the form of this manual, a 163 page booklet presenting in simple language a brief history of psychiatry, some definitions of mental disease. a classification of mental disease, a chapter on psychopathology, one on the eiology of mental disease, with brief discussions of the various psychiatric syndromes, and, finally, two very

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important chapters on the ethics and duties of the psychiatric nurse. While this book has some inaccuracies, the general content of the presentation is excellent. It is extremely practical for the use of attendants in state institutions.

William C. Menninger, M.D.

BRAUDE, MORRIS: The Principles and Practice of Clinical Psychiatry, Philadelphia, P. Blakiston's Son & Co., 1937.

As a byline the author is listed as an associate clinical professor of psychiatry at the Rush Medical College. He is, however, not listed in the 1937 directory of the American Psychiatric Association. He has compiled in 363 pages a presentation of the major psychoses, a short section devoted to the neuroses and psychoneuroses and brief sections each on malingering, mental deficienties and psychoanalysis. His material is essentially accurate and though his leaning is definitely psychoanalytic, he isolates the total discussion of psychoanalysis to a chapter at the back of the book. The discussions on the various types of illnesses are purely descriptive. His presentation of the etiologic factors are superficial and his brief paragraphs on treatment are inadequate. His style tends to be colloquial and informal, at times sacrificing dignity and at other times sounding dramatic. While this book is accurate, it is not in the same class of authoritative textbooks in psychiatry by White and Noyes, and does not present any special advantageous features or different points of view from these other texts.

William C. Menninger, M.D.

NEW BOOKS RECEIVED

OBSTETRIC AND GYNECOLOGIC NURSING—Frederick H. Falls, M.D., Professor of Obstetrics and Gynecology, University of Illinois College of Medicine and Jane R. McLaughlin, B.A., R.N., Supervisor of Department of Obstetrics and Gynecology, Research and Educational Hospital, University of Illinois College of Medicine. Octavo 492 pages with eighty-three illustrations. Published by The C. V. Mosby Company at \$3.00 per copy.

This is, according to the author, a text written for the more mature nursing students, though no attempt is made to treat the various subjects exhaustively. The principles involved are presented, and the clinical application of this knowledge to the duties of the nurse are pointed out. Part I, on obstetrics, includes chapters on the anatomy and physiology of the female sex organs; the physiology, pathology, diseases and management of pregnancy; as well as three chapters on labor (normal, abnormal and operative); the care and management of the newborn, the puerperium; outpatient nursing service; the nurse in the prenatal and postnatal clinics; and the nurse in the home delivery. Part II, on gynecology, has chapters on diagnosis, birth injuries, the various types of gynecologic diseases, operative procedure, and six chapters on preoperative and postoperative (including radium) treatment. A glossary is included.

THE PRINCIPLES AND PRACTICE OF CLINI-CAL PSYCHIATRY—By Morris Braude, M.D., Associate Clinical Professor of Psychiatry, Rush Medical College. Octavo 382 pages. Published by P. Blakiston's Son & Company. The author in the preface states that his purpose in writing this book was to ease the lot of the student of medicine in the difficult field of mental disease . . . to simplify, organize, make interesting and release him of unfriendly bias. The principles, and wherever possible, the psychodynamics of every mental state are emphasized and lest the student receive the impression that disease of the mind is separate from that of the body stress is put upon the necessity and value of the problems in internal medicine. The book is divided into four parts: Introduction; Major Psychoses; Neuroses and Psychoneuroses; and Miscellaneous (Malingering. Mental Deficiency and Psychonanalysis).

PHYSICAL DIAGNOSIS—The Art and Technique of History Taking and Physical Examination of the Patient in Health and in Disease—By Don C. Sutton, M.D., Associate Professor of Medicine, Northwestern University School of Medicine. Published by The C. V. Mosby Company. Octavo, 495 pages with 298 text illustrations and 8 color plates.

The author in the preface states—"Notwithstanding the advances in the exact sciences, the diagnosis of disease continues to be dependent almost entirely upon the history and physical examination. This volume has been written to acquaint the student and the physician with the methods of examination by the use of the senses. Contents include chapters on Historical Introduction: Methods; The History; General Examination; The Chest; The Heart; The Abdomen; and the Neurologic Examination.

THE TECHNIC OF LOCAL ANESTHESIA—By Arthur E. Hertzler, M.D., Professor of Surgery in the University of Kansas; Surgeon to the Halstead Hospital, Halstead, Kansas. Sixth Edition. Published by The C. V. Mosby Company at \$5.00 per copy. Octavo, 284 pages with 142 illustrations.

Drugs employed and the technic of administration in all forms of minor and major operation. The chapter on spinal anesthesia has been revised by Dr. Irene A. Koeneke to cover all the practical points required for the use of this method.

SHORT-WAVE DIATHERMY—By Tiber de-Cholonky, M.D., Associate in Surgery, New York Post-Graduate Medical School, Columbia University. Published by the Columbia University Press at \$4.00 per copy. Octavo, 310 pages with 38 illustrations.

Contents: Part I-Introduction: Historical Outline of Short-Wave Diathermy. Part II—The Physical Aspects of Short Wave Diathermy. Part III-Experimentation With Short-Wave Diathermy: 1. Experiments on Bacteria and Other Organisms; 2. Experimentation on Animals; 3. Wave Length. Part IV-The Technic of Short-Wave Diathermy: 1. Short Waves and Other Treatments: 2. General and Mechanical Principles in Short-Wave Technic. Part V .- The Clinical Applications of Short-Wave Diathermy: 1. Infectious, Allergic and Metabolic Diseases; 2. Diseases of the Respiratory Tract; 3. Diseases of the Gastro-Intestinal Tract: 4. Diseases of the Genito-Urinary Tract; 5. Diseases of the Circulatory System and the Lymph Glands; 6. Diseases of the Locomotor System: 7. Diseases of the Nervous System; 8. Miscellaneous Conditions; 9. Malignant Diseases. Part VI—Conclusion. Bibliography, Abbreviations. Index

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CLINICAL ENDOCRINOLOGY—By Samuel A. Loewenberg, M.D., Clinical Professor Medicine, Jefferson Medical College, Philadelphia. Foreword by Hobart A. Reimann, M.D. 194 illustrations. 37 tables and charts. Octavo 852. Published by F. A. Davis Company at \$8.00 per copy.

General historical review, methods of approach and the salient points in obtaining a history, in performing a physical examination, and in interpreting the findings. A chapter is devoted to each of the glands, arranged according to their anatomic positions starting from the pineal and ending with the gonads. A chapter is devoted to each of the glands and contains a short historic sketch, the anatomy, the physiology, the more important researches, the specific hormones and the pathology of the glands. Then follows a description of their functional disturbances and the resulting endocrinopathies together with their diagnosis, differential diagnosis, prognosis and treatment. Each chapter ends with a bibliography. A brief description of the polyglandular endocrinopathies, of the carotid body and of suspected hormones in the liver, spleen, gastrointestinal tract, etc., and discussion of laboratory interpretations of service in the endocrinopathies, are included.

AN INTRODUCTION TO DERMATOLOGY—Third Edition—By Richard L. Sutton, M.D., Professor of Dermatology, University of Kansas School of Medicine and Richard L. Sutton, Jr., M.D., Instructor in Dermatology, University of Kansas School of Medicine. Octavo 666 pages with 229 illustrations. Published by The C. V. Mosby Company at \$5.00 per copy.

A new edition of a familiar work. According to the authors the volume has been completely rewritten with an attempt at reclassification, descriptions of a number of new diseases and forty-five new illustrations have been added as well as much new information regarding therapy. The section on syphilis has been enlarged and many other changes have been made.

TREATMENT BY DIET—By Clifford J. Barborka, M.D., Department of Medicine, Northwestern University Medical School. Third edition, revised, published by the J. B. Lippincott Company. Octavo 642 pages with eight full page illustrations and many charts.

The author in the preface states that the chief differences in the third edition are a discussion of the present status of the clinical aspects of the vitamins: the present conception of the use of Protamine Zinc Insulin; and an enlargement of the discussion of obesity. The book is divided into five parts, namely: Diet In Health; The Application of Diet Therapy; Diet In Disease; Routine Hospital Diets; Appendix and Bibliography.

CONDITION SATISFACTORY—A Physician's Report Of His Own Illness—By Dr. Sandor Puder—Translated from the German by Hildegard Nagel. Octavo 201 pages. Published by Alfred A. Knopf, Inc., at \$2.00 per copy.

According to the publications this is "A book for everyone who has ever had an operation or may have to undergo one—an authentic account of what really happens before, during and after a patient is under an anaesthetic."

RECENT ADVANCES IN PULMONARY TUBERCULOSIS—By L. S. T. Burrell, M.D., Senior Physician to Royal Free Hospital. Octavo 320 pages with 48 plates and 22 text-figures. Published by P. Blakiston's Son & Co., Inc. Third edition.

This new edition has, according to the author, been in a large part re-written with new chapters dealing with the infectivity and immunity and with bovine and childhood tuberculosis; classification and types of pulmonary tuberculosis, including the military form. The chapters on radiology and surgical treatment have mostly been re-written.

CONCEPTS AND PROBLEMS OF PSYCHO-THERAPY—By Leland E. Hinsie, M.D., Professor of Clinical Psychiatry, College of Physicians and Surgeons, Columbia University. Octavo xv pages plus 199. Published by the Columbia University Press at \$2.75 per copy.

Contents: 1. Extent and Nature of Psychotherapeutic Problems; 2. Psychoanalysis: Freud; 3. Psychobiology (Jung); 5. Statistical Evaluation of Psychotherapeutic Methods, by Carney A. Landis, Ph.D., Assistant Professor of Psychology, Columbia University; Research Associate in Psychology, New York State Psychiatric Institute and Hospital. Bibliography. Index. Chart. The publishers state that the aim of this book is to indicate the general conceptions that prevail with respect to the structure and functions of the mind, and to show, as well as possible, what inflence these conceptions have had upon the problems of psychotherapy.

YOUR DIET AND YOUR HEALTH—By Morris Fishbein, M.D., Editor, The Journal of the American Medical Association. Octavo 298 pages. Published by Whittlesey House, McGraw-Hill Book Company at \$2.50 per copy.

According to the publishers, Dr. Fishbein in this text examines the claims of various diet "systems" and tell what you should know about diet. Includes a number of tables giving food values, calorie content of various foods, vitamin sources, minimum diets, food values of alcoholic beverages, etc.

SYPHILIS—The Next Great Plague To Go—By Morris Fishbein, M.D., Editor, The Journal of the American Medical Association. Published by David Mc-Kay Company, Philadelphia, at \$1.00 per copy. Octavo seventy pages with eleven illustrations and thirteen charts.

This book is written for the layman, avoids complicated technical terms and treats the subject factually from the viewpoint of direct answers to questions the average reader would ask. For instance: What causes syphilis? Is the disease curable? How can its spread be prevented? What are the symptoms? When may syphilitics marry? What is a Wasserman Test? The cost of thorough treatment? etc.

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★Proc. Soc. Exp. Biol. and Med., 1934, 32, 241-245
Laryngoscope, Feb. 1935, Vol. XLV, No. 2, 149-154
N. Y. State Jour. Med., June 1935, Vol. 35, No. 11
Laryngoscope, Jan. 1937, Vol. XLVII, No. 1, 58-60

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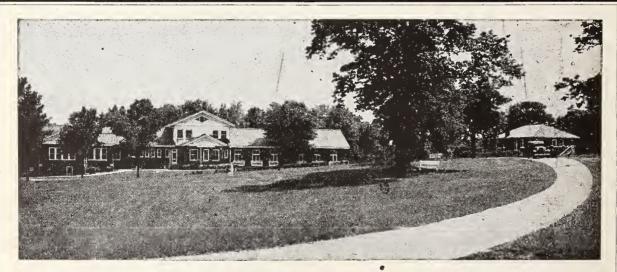
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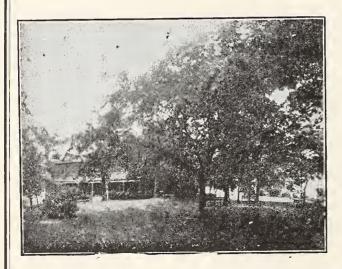
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THE JOURNAL

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INSULIN SHOCK THERAPY: OBSER-VATIONS ON SIX CASES

JOHN RUSSELL M.D.* RALPH M. FELLOWS M.D.†

Osawatomie, Kansas

First reports on Sakel's hypoglycemic shock therapy^{1,2} through use of insulin in schizophrenic patients stimulated much interest and were quite startling as the treatment appeared to open a new field of therapy—a field with promising results. The reports were very favorable; so much so one was quite skeptical. Any new treatment, however, because of previous poor therapeutic results in schizophrenia, was welcome and so was thoroughly investigated. A satisfactory complete review of the literature describing history, technique, and theories involved has already been made in this Journal by Morse.3 We wish to report our results and observations in a series of six patients who began treatment in June, 1937. Present observations are not final. We hope to make a further report of our first series and probably of our second of nine cases now completing treatment.

Treatment was carried out with definite objectives in mind; to get patients well in order to leave the institution, to study the method of treatment, to observe and study mental reactions and changes, to observe physiological changes, and to determine applicability of this treatment in state hospital patients.

PROCEDURE

Our first group of cases, being more or less experimental, care was taken in selecting patients of different types, in spite of the fact that we realized from the literature that the young paranoid schizophrenic with illness of but short duration offered the best prognosis. We were more interested in studying effect of treatment on patients more typically found in state

hospitals. Three paranoid schizophrenics of long, moderate, and short duration; two chronic catatonics; and one markedly depressed and suicidal patient were studied. Complete physical, neurological, laboratory, and mental examinations were first made. All cases were males and had been given previously a poor prognosis by the staff. Their course in the hospital had been bearing out well these predictions.

Written permission for treatment was readily obtained from relatives. All patients slept and were treated in one dormitory. Beds, separated by screens, were lined up parallel so that all patients could be seen at all times during treatment. A doctor and two nurses carried out the procedure and constantly observed the patients. After treatment patients had the freedom of a large day hall and porch.

The procedure used was that of Sakel and that described by Glueck4. Every morning between 6:00 and 6:15 after temperature, pulse, respiration, and blood pressure were recorded each patient, with no breakfast, was given intramuscularly increasing doses of insulin**; sixteen units on the first day and increased by eight units each succeeding day. This was kept up until desired effect was produced—deep coma in all but the catatonics, and an excited and alert period in the latter. This effective dose was maintained from day to day or decreased or increased slightly, depending on the patient's reactions during previous days' treatment. Hypoglycemic state was maintained in the catatonic patients up to the time that they became restless and excited or at least awake and alert. They were not allowed to pass into somnolent stage or become comatose (phase 2) ***. At desired time, usually two and one-

^{**}Insulin used was 80U. iletin. ***Dr. Sakel describes 4 phases of treatment—
Phase 1. Increasing hypoglycemia with patient still able to take

sugar by mouth.

Phase 2. Hypoglycemia beyond stage of ability to swallow sugar solution.

Phase 3. Rest period.
Phase 4. Polarization—hypoglycemia produced after satisfactory results to just the pre-shock level.

^{*}Staff physician. † Superintendent. State Hospital, Osawatomie, Kansas.

half to four hours, 200 grams of cane sugar dissolved in 500 cc of milk were given to them orally. The hypoglycemic state was discontinued in the others for one of three reasons; i.e. a lapse of five hours had intervened after insulin injection; moist coma became dry; or when signs of possible complications were noted. Periods of coma varied, usually from one to three hours. Sugar was given by one of two methods. If patients were quiet, did not resist tubing, and latter could be carried out with no difficulty 500 cc of the sugar milk solution were fed through nasal tube. Otherwise fifteen cc of fifty per cent glucose was given intravenously and was followed by oral voluntary drinking of sugar milk solution when patient came out of coma—usually in two to five minutes. No patient was allowed to leave the treatment room until the sugar solution had been retained in the stomach, he was rational, and could walk about on his own accord. Routine of rest of day was no different than from remainder of patients except that closer watch was kept for physical and mental changes. Treatment was carried out each day except Sunday, regular rest day (phase 3) and other rest days ordered because of complications or too severe reaction on day prior. Phase 4, or polarization phase, was carried out with each patient during the last week of treatment.

The temperature, pulse, respiration, and blood pressure were noted throughout treatment, at 3:00 p.m., and at other times as deemed desirous. Fasting blood sugars were taken on first day. They were then taken two hours after insulin injection and one-half hour after sugar solution had been given. As no parallelism between blood sugar level and clinical state could be noted, blood sugars were not regularly continued after second week. Weights were recorded weekly as well as physical checkups and urine examinations.

No attempt at psychotherapy was made. Questioning in regard to mental condition was minimized as much as possible but was necessary to some degree to check progress and to determine patient's mental status. In this group no real attempt at definite recreational or occupational therapy was made in order to eliminate their part in contributing toward therapeutic results. After active treatment all patients, however, were placed on an outside detail. The only drugs used were adrenalin, as necessary during treatment; occasional aspirin for headache; cathartic, when needed; and iron in two patients with some signs of

anemia. One patient had syphilis and his antiluetic treatment was maintained.

PROTOCOLS

Case 1.—L.C., 34, married, admitted March 22, 1937. Diagnosis—paranoid schizophrenia -onset February, 1937. Treatment was given between June 1 (five months after onset) and August 10. Patient was a schizoid personality for years but definite personality changes were only noted since last February. He became suspicious, evasive, and egotistical: began to have many delusions of a persecutory nature, thought home was wired with electricity to pick up messages, and he received messages from a power higher than man. He became worse here under the usual routine, became more inaccessable, finally mute, and refused to recognize anyone. It was necessary to transfer him from the psychopathic hospital to a continued treatment building. Patient took his hypoglycemic treatments nicely, although objecting orally at first. He went through a definite wildly excited period on the ninth to the thirteenth days of treatment, when it was difficult to manage him. From then on he lapsed into wet coma daily from one to three hours, average dose was 128 units. In coma patient was quite aggressive, would grind his teeth, and appear to be in great mental agony. Eleven convulsions of moderate degree occurred throughout treatment. He became brighter in second week and showed very definite mental improvement at the end of the first month—becoming sociable, cooperative, took outside interest, lost delusions and developed some insight. His family now see him as his old self. He gained thirty-four pounds in weight, and was sent home three weeks after treatment was ended.

Case 2.—N.D., 22, admitted October 3, 1936 three weeks after onset. Diagnosisparanoid schizophrenia. Patient had been unable to get a permanent job for four years: and had given this as the reason for not marrying a girl to whom he was engaged. He had developed vascular syphilis and had been having trouble at home. Condition started rather abruptly; patient becoming asocial, would do no work, believed it was not safe at home, thought he was involved in a war between two towns, and believed he was a G-man. Believing he was persecuted by his family he attacked different members. During the next seven months stay at this hospital he showed no improvement. Insulin treatment was given between June 1 (nine months after onset) and

August 21. He cooperated well but was very difficult to manage as he was subject to frequent convulsions, would be restless, and toss about. Coma was usually of the dry type. Oral movements such as sucking and puckering were marked. He always felt very weak and tired because of the treatment—and would claim he was "washed out and only half there." Reaction was first noted on 120 units, dose was later raised to 170 units. Patient later showed a definite sensitivity to insulin-going into deep coma on sixteen units. He showed some improvement, becoming more social, gained some insight, and lost most delusions. His delusion of being a G-man is still present but is not fixed or systematized. He gained seventeen pounds in weight. We feel that patient requires some further treatment before he will be able to go home.

Case 3.—B.B., 29, single, entered hospital February 26, 1933. Diagnosis—paranoid schizophrenia, eight years duration. He thought that he had lost his real life, was spiritual, could see all the wrongs on earth, and had a special mission to perform. He was quite egotistical and proud and felt quite sure he would be president some day. He was favoring Greta Garbo as he was going to marry her. He had written numerous letters to prominent men in public life concerning reforms, and has actually received several replies from the secretary of the President of the United States. He was very difficult to manage, being sly and clever, and because of the feeling of superiority would do no work and would get in trouble with other patients and attendants. Treatments were begun June 1 (eight years after onset of psychosis) and were finished August 21. They were taken very well. Coma was moist and usually uneventful. First coma dose was 144 units. After the first month patient showed some definite improvement and this has been progressing up until the present time. He developed a little insight. His delusions are all still present but not so fixed. He is more cooperative, gets along well with others, and is now a good worker. He gained nine pounds in weight. There is still marked evidence of psychosis however, and the patient while greatly improved, is definitely not able to leave the hospital.

Case 4—W.C., 27, single, admitted January 15, 1937, diagnosed catatonic schizophrenia—onset summer of 1935. Patient developed loss of self confidence, became asocial, quit his work in October, 1935, had crying spells, and would not eat. He was hospitalized because of his

impulsive behavior and refusal to eat. entered the institution in catatonic stupor, was mute, frightened, and untidy. Sodium amytal interviews brought out numerous auditory hallucinations and unsystematized delusions. Condition remained practically constant up to time of beginning of the insulin treatment on June 1 (two years after onset of psychosis). They were completed August 21. He took his treatments well, and reached excited stage on 128 units. At times he would show no excitement or agitation but instead would be wide awake and alert. He never remained agitated or excited throughout the day, and never went into coma. Under treatment patient became more cooperative, fairly tidy, was no longer involuntary and would talk and eat. He gained twenty-nine pounds. However, he still shows no initiative, is asocial, still has hallucinations and delusions, and is quite confused. He showed no progress after treatment was over, and became uncooperative. We regard this case as a failure.

Case 5.—A.G., 23, single, admitted March 22, 1937. Diagnosed catatonic schizophrenia. First symptoms noted in September, 1934, when patient became disinterested, could not keep up his regular work, was always tired and did not want people to watch or care for him. He was afraid he would do something he was not supposed to do, and was practically bedridden for nine months prior to admission. This man was completely mute, had waxy flexibility, would do nothing but stand or sit in one position, was impulsive and tried to strike attendants on several occasions. Sodium amytal for interviews and treatment failed, and insulin treatment was given between June 1 (three years after onset of psychosis) and August 21. The treatments were well taken. He was never allowed to go into coma. No reaction was noted until 152 units were given. He would then become alert or excited and restless about three hours after insulin was given. With treatment patient lost his mutism, ate well, gained twenty-five pounds, developed some emotion and outside interest, and became cooperative. He was very glad to go out to work on a detail. He is however still somewhat confused, slow in action, has occasional nocturnal auditory hallucinations, and is a bit backward. Although patient is not ready to leave at the present time he is progressing very nicely, has some insight, is consciously trying to get well; and we feel that he will soon be able to go home.

Case 6.—C.S., married. First admitted June 18, 1936, and paroled after some improvement November 22, 1936. He was returned after several suicide attempts January 10, 1937. Probable diagnosis; depressed phase of manic depressive psychosis. This case was diagnostically obscure, patient appearing quite schizophrenic, as well as depressed. In March, 1936. after some marital troubles following a secret marriage, patient lost confidence, felt he could not understand things, developed delusions of reference and persecution, felt weak and exhausted, thought he was going to be killed and that everyone wanted to do this. He was continually worried and depressed and had a feeling of unworthiness. He had considered suicide and made one feeble attempt. He was sent here the first time after an acute psychotic episode. He made progressive improvement and was paroled five months after admission. After living a month with his brother he developed brooding spells and after two suicide attempts by multiple lacerations was returned to this institution. On the way to the hospital he jumped out of the window of a fast moving train. While here, because of continuous and desperate suicide attempts patient had to be kept in restraint constantly. In spite of this he made an attempt at castration three times, cut his leg deeply, and lacerated his face and scalp. After five months in the hospital "mutilation" tendencies continued. Being rather desperate as to what to do in this case it was decided to try insulin treatment. This was started June 14 and completed August 14. He took his treatments very well and began to go into deep wet coma on 136 units. He was very aggressive throughout treatment. Patient made a very satisfactory recovery—he understood well his condition, lost his feeling of unworthiness. showed no depression or suicide tendencies, and made a very good worker on the outside. His relatives state he is as he was years ago and in a much better condition that at the time of his first parole. Return home was delayed in an attempt to analyze environment to which the patient had to return, and to determine with whom he should live.

OBSERVATIONS AND COMMENTS

In judging our results it is well to remember that the patients chosen for treatment were the average state hospital patient. The duration of illness in only one case was less than six months. Improvement was very obvious in all cases, although only two, Case 1. L.C.—

and Case 6. C.S.—showed sufficient recovery to be able to go home. Two others, Case 2. N.D.—and Case 5. A.G.—showed fair amount of improvement, and probably will soon be able to go home with a little further management, other than hypoglycemic treatment. Although the other two cases, Case 3. B.B.—and Case 4. W.C.—showed definite improvement, were much easier to manage, and could do constructive work, their treatment can be regarded as almost a failure.

The physical changes that occurred throughout the treatment followed no definite rules but tended to follow a certain pattern. Patients were sleepy at first, would become wakeful, pass into a restless or excited period, and then became somnolent and finally passed off into coma.

The pulse became elevated in all of our cases during treatment: bradycardia was not noted. The pulse usually remained within normal limits: although late in coma, or when patient became restless, or in event of respiratory difficulty, it would gradually rise to 120. If this rapid rate continued treatment was stopped. During treatment the systolic blood pressure always rose, but the diastolic pressure either dropped or rose but slightly. Pulse pressure was usually increased. Preceding a convulsion and during latter there was a marked rise in systolic pressure. In the afternoons the blood pressures always dropped below the average normal reading—this was especially true in systolic reading, and so pulse pressure usually was below normal. After course of treatment was completed blood pressures were about the same as before treatment.

The respiratory rate showed very slight increase during treatment. Respiratory distress only occured when patients were in coma. It was usually of a spasmodic nature and of a short duration. When it became continuous or prolonged, treatment was stopped. Respiratory difficulty resulted in deep, noisy, rapid breathing, and was usually accompanied by rigidity of extremities and body. The tongue at times blocked the air passage, but this was readily alleviated by upward pressure on angle of the jaws. Salivation was always a problem because of danger of aspiration. In coma, patients were propped up in bed with head to side so that saliva could collect in front of mouth and drool out-manipulation of cheeks would aid this. Case 1. L.C., developed a dry pleurisy on the fourteenth day of treatment. It lasted but two days and caused no complications.

Perspiration occurred to some degree in all our patients. This apparently accounted somewhat for the drop in temperature, usually of one to two degrees during treatments (we are getting a much greater drop in our present series.) In afternoons a slight rise above normal occurred, temperatures of 99.2 to 100 degrees were frequent. It would usually return to normal at bedtime.

Convulsions occurred to some extent in all of our patients who went into coma. Some warning signs practically always occurred and convulsions could often be aborted or their intensity decreased by giving five to fifteen minims of 1:1000 adrenalin solution. Their occurrence tended to return patients to consciousness and frequently did. When a convulsion once occurred there was a tendency for recurrence on succeeding day's treatment, and at times on the same morning of treatment, if sugar had not already been given. They were not regarded as alarming as early literature made one believe. We allowed our patients to pass through convulsive periods and noted no ill effects. They were watched very closely at this time and adrenalin was often given. When it was believed convulsion would re-occur treatment was stopped.

No cardiac or renal complications were noted. All patients gained weight—seven to thirtyfour pounds. Although they felt weak and "washed out" after their treatment, all but Case 2. N.D., felt much improved physically from day to day.

Throughout treatment improvement was progressive, and one felt during the treatment that the patient was actually acting out and expressing many of the fundamental conflicts etiologically important in his psychosis. Acting out of the psychosis during hypoglycemia as described in literature4 was well demonstrated to some degree in all cases. Prior to going into coma and during its early stages, and as he would come out Case 6. C.S., would become terrifically aggressive, grit his teeth, snarl, and clench his fists. While stuporous he would frequently ask the doctor to box six rounds with him. With improvement, during treatment, his aggressiveness became less. Patient apparently got rid of some of his aggressions. He probably previously had turned these aggressions upon himself and so was suicidal. Case 1. L.C. was very fearful and aggressive during treatment. He seemed to be in great mental agony throughout coma. Case 2. N.D., usually

had a great sense of guilt coming out of coma, and at that time would pray and ask mercy of God. Case 4. W.C., in his excited period would lose his natural timidity, great fear, and the confusion he usually seemed to have. He would usually be quite happy during this period. On one occasion he jumped out of bed and yelled "I've been a weakling all my life, always scared—I won't be anymore. I'll fight anyone here." He specifically mentioned all those in the room with the exception of one big husky patient. After looking up at and studying this patient, he said with a smile, "I'll fight anyone but vou.'

No apparent change was noted during the fourth phase of treatment. Its value is doubtful. The insulin dose had to be quite small, eight to forty units.

Patients had no recollection of what occurred during stuporous stage. They all spoke favorably of the treatment and all believed that it had done something to them and had helped them. None were exactly specific in describing this favorable change.

Our observations as yet have been much too meager to attempt any explanation of changes noted or to form any definite conclusion as to the exact value of the treatment. We feel, however, that patients are directly benefited by it. Although this treatment is very demanding in constant attention, and while it is difficult and dangerous to carry through, we believe it has a definite place in treatment of state hospital patients.

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A Doctor's Halfday.—A habit that should be formed early and rigidly adhered to is that of taking one afternoon off every week. And no matter how little regard you may have for the Sabbath, you will certainly be better off if you will cut your Sunday work down to the minimum, and make it, as truly as your profession will allow, a day of rest. The appointment system will help to provide a free afternoon, and your patients will learn to respect your need for recreation. The use of this afternoon, as well as the question of vacations and the importance of attending medical meetings, will be discussed later. - Wingate M. Johnson, M.D., Page 57, "The True Physician". The Macmillan Co., 1936.

TREATMENT OF ACUTE SEPTIC GONORRHEAL ARTHRITIS

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To assume that all cases of acute septic gonorrheal arthritis will inevitably develop an ankylosis is a fatalistic attitude which is inconsistent with the results of modern therapeutic measures. It is the writer's impression that if the serous membranes lining the joints are given an adequate opportunity they will react to a gonorrheal invasion at least as well as does the mucosa of the genito-urinary tract.

If a joint becomes swollen and painful in the course of an acute gonorrheal urethritis it almost certainly is a metastatic gonorrheal infection. These acute symptoms usually occur in the joint during the third week of the urethral infection though the time of their appearance may vary from a few days to seven weeks following. Usually before localizing in one or two joints several other joints may be transiently involved. The joints in which the infection becomes localized rapidly becomes so swollen and painful that the patient is made bedfast. A fever of 101 to 102 degrees is usually recorded with a white cell count of 10,000 to 12,000. Aspirated fluid from the distended joint when centrifuged and stained usually will demonstrate the typical gram negative diplococci which are often intracellular. Culture of the aspirated fluid on ascitic agar will almost invariably yield a growth of gonococci in twenty-four hours even when no gonococci can be demonstrated by smear of the aspirated fluid.

SURGICAL TREATMENT

After the diagnosis of acute septic gonorrheal arthritis has been established the symptoms and the physical findings presented by each case will indicate either the surgical or the medical line of therapy in that case. The treatment of the arthritis should be surgical if the case presents:

- 1. Relatively moderate pain.
- 2. Abundant fluid—not too purulent.
- 3. Little periarticular swelling.

The tenant of adequate and prompt drainage of any abscess is the surgical theory of the treatment of an acute gonorrheal arthritis. Incision is unnecessary if the involved joint such as the knee, hip, ankle, or elbow is easily accesible for aspiration. Aspiration of one of these larger joints is done daily in the early stages and after the acute stage is over as frequently as is neces-

sary to maintain it symptomless objectively and subjectively.

The joint is usually so distended that the site of aspiration is easily determined. The knee is most accessible just lateral to the proximal pole of the patella. The ankle is best aspirated medially to the lateral malleolus. The hip may be entered just laterally and distally to the point where the iliac artery crosses the inguinal ligament. The elbow joint is superficial on either side of the olecranon but because of the ulnar nerve can be entered with greater safety from the lateral side.

Regardless of the joint involved the procedure of aspiration is the same. Using a small needle and one per cent novacaine a wheal is raised in the skin at the selected site and a tract through the subcutaneous tissue and capsule is infilterated with one per cent novacaine. An eighteen gauge needle of sufficient length is passed through the anesthetized area into the joint. The fluid is completely aspirated and pressure applied to the joint capsule to force the fluid from all possible recesses to a point where it can be removed through the needle. After all the fluid has been removed the joint is injected with air through the same needle. The object of air injection is to distend the joint sufficiently to prevent the coaptation of the inflamed synovial surface. Maintaining these surfaces distended relieves pain and aids in the prevention of the formation of adhesions.

The paraphernalia necessary for air injection is a sphygmomanometer, an eighteen inch rubber tubing with Lewer adaptors on each end and an additional eighteen gauge needle. The cuff of the sphygmanometer is so wound on itself that when the cuff is inflated a back pressure is created which registers on the gauge of the apparatus. (See illustration). An area of the tubing is sterilized by thoroughly cleansing it and applying an alcohol pack. Through this sterilized area the extra needle is passed obliquely into the lumen of the tubing. The tubing with the Lewer adaptors is then used to complete the connection between the joint and the sphygmomanometer. By slowly inflating the cuff of the sphygmomanometer and allowing plenty of time for the air to pass through the tubing into the joint the pressure of the inflation of the joint may be accurately measured. The joint is usually inflated to about ten points less than the diastolic blood pressure which pressure is sufficient to precent apposition of the synovial surfaces and yet not great enough to interfere with the circulation in the synovial membrane.

Smaller joints such as those of the hand, wrist and foot are difficult to aspirate because the capsules of those joints not having the redundency of the capsules of the larger joints do not become sufficiently distended. These small joints are best treated by early incision and drainage. After incision a rubber drain is allowed to remain in place for several days. Healing is usually prompt after the removal of the drain if the procedure is done early in the course of the infection.

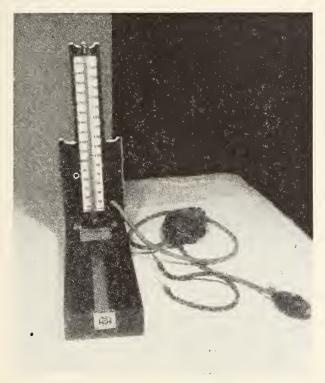


Fig. 1. Apparatus for air inflation of joints.

MEDICAL TREATMENT

These cases for which surgical procedures are applicable constitute the greater proportion presenting themselves for treatment. However, the treatment should be medical, that is by fever therapy if the patient has:

- 1. Two or more joints involved.
- 2. Severe, excruciating pain.
- 3. Little fluid and that purulent.
- 4. Marked periarticular swelling which is very tender.

When fever therapy is used it should be used heroically. One or two shocks of 103 or so degrees are almost invariably inadequate. Experimentally it has been found that a rectal temperature of 106.5 degrees maintained for five hours will sterilize the body of gonococci after one to three treatments. In the experience

of the writer four to six reactions of 105 to 106 degrees orally at bi-weekly intervals have usually been effective treatment. This is undoubtedly heroic treatment but for the usual strain of gonococci a very much less dosage is temporizing. It is felt that the fever can be more rapidly regulated by physical means such as the heat cabinet, diathermy or hot baths than by protein shock. By physical means the degree of fever may more surely be obtained and may be maintained for as long as is desired. The degree of fever from foreign protein shock can not be adequately determined before the injection and the crest of the fever cannot be adequately maintained for a sufficient period.

A very simple and universally available method of producing hyperpyrexia is the following: After a previously administered heavy dose of morphine has become effective the patient is placed in a tub of water of 100 to 105 degrees. Heavy blankets are thrown over his shoulders and arms and pinned snugly about his body. These blankets are maintained thoroughly saturated by dipping the tub water over them. A careful mouth temperature record is charted every 10 minutes as more hot water is added to the tub. After the patient's temperature has reached 1055 to 106 degrees which should require about one hour only sufficient hot water is admitted to the tub to maintain this temperature range for three hours. During the treatment morphine may be administered as indicated to control discomfort, fluids should be given freely and ice bags placed on the head. The discomfort caused by this treatment is considerable but should be tolerable. If there is evidence of shock or loss of temperature control the treatment should be immediately terminated and the patient treated as indicated.

Following the one hour of elevation of the temperature and the three hours of maintaining it the patient is placed in bed closely wrapped in woolen blankets for an additional hour. After being in bed for one hour the blankets are loosened then gradually removed to allow the temperature to drop slowly.

Some of these joints have been treated by early fixation in plaster casts but because of the high frequency of ankylosis this treatment has been discarded. The only situation in which a cast is indicated is when other measures have failed and the arthritis is apparently progressing to an ankylosis. A cast applied at that stage which maintains the joint in the position of

optimum function is good therapy.

Vaccines used several years ago gave no relief from symptoms though a fair trial was given in several cases. More recently the gonococcus filtrate was tried in five cases without benefit.

CONCLUSIONS

Acute septic gonorrheal arthritis is usually responsive to adequate treatment. The treatment of this condition is either the surgical evacuation of the pus by aspiration or incision or medically by adequate fever therapy.

TUBERCULIN TESTS IN 1,054 COLLEGE STUDENTS

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It is well established that the best method of determining the incidence of tuberculous infection in any area is by tuberculin testing. In like manner, the best method of determining the presence of clinical tuberculosis among positive tuberculin reactors is by x-ray examination of the chest. In 1936 the Student Health Service of Kansas State College instituted tuberculin testing on a voluntary basis for all students who were matriculating for the first time. It is interesting to note that only three students refused the test and in each instance the parents were devout Christian Scientists. The positive reactors of this group of students were offered chest x-rays at cost and approximately seventy per cent availed themselves of the opportunity. It is planned to continue this program annually.

In September 1936, 1,054 entering college students were tuberculin tested. This group of students included 761 males between the ages of sixteen to thirty-one years inclusive, and 293 females between the ages of sixteen to twenty-eight years inclusive. Approximately eighty-

*The Student Health Service, Kansas State College. †The Department of Radiology, University of Kansas Medical School. six per cent of this group were between the ages of seventeen to twenty years inclusive. About ninety per cent were residents of Kansas with eighty per cent coming from small towns and rural districts.

Each student was given an intradermal injection of 0.00002 milligram of purified protein derivative**. The result of each test was read forty-eight hours following the injection and in the absence of a positive reaction the second intradermal injection of 0.005 milligram of purified protein derivative was made. The result of the second test was read fortyeight hours following the injection. The results of these tests were classified according to the following method: negative—absence of redness or swelling at the site of injection; questionable—the appearance of an area of swelling less than 0.5 centimeter in its greatest diameter; one plus—the appearance of an area of swelling between 0.5 and 1.0 centimeters in its greatest diameter; two plus—the appearance of an area of swelling with its greatest diameter between 1.0 and 2.0 centimeters; three plus the appearance of an area of swelling with its greatest diameter more than 2.0 centimeters; four plus—the appearance of an area of swelling with definite necrosis. This classification is modified from the one given by the National Tuberculosis Association¹.

The results of these tuberculin tests are summarized in Table 1. There were 336 or thirtyone and eight-tenths per cent positive reactors. 230 or sixty-eight and four-tenths per cent of these positive reactors were found with the use of the first strength test and 106 or thirtyone and six-tenths per cent were found with the use of the second strength test. Most of the questionable first test reactions were found to be positive with the second test. There were thirty unfavorable (four plus) reactions in the first test series and only one additional four plus reaction encountered in the entire 824 second tests. This tends to show that if the individual's sensitization to tuberculo-

**The material used for these tests was furnished us by Dr. Esmond R. Long, Director, Henry Phipps Institute, University of Pennsylvania. The data obtained from the tests has been forwarded to the Institute for compilation.

TABLE 3								
Evidence of arrested childhood type of tu- berculous infection	Evidence of adult type of tuberculous infection. Activity undetermined.	Suspicious chest findings. Under observation	Old pathological lung changes of non-specific etiology	Negative findings for any form of tuberculous infection				
122	1	5	21	92				
(50.6%)	(0.4%)	(2.0%)	(8.6%)	(38.1%)				

TABLE 1

Race	X X X X X X X X X X X X X X X X X X X	Age	No. Tested with P. P. D. No. 1	No. failed to return	No. Questionable Reactions	1+	+ No. Positive P. P.	D. No. 1 Reactions		No. Tested with P. P. D. No. 2	No. failed to return	No. Questionable Reactions		+ No. Positive P. P.	D. No. 2 Reactions	
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	1 11	$\frac{16}{17}$	114	0	0	7	5		5	4	0	0	0	0	0	0
	"	18		0	0		18	12	8	93	0	1	8	1	0	0
**	**	19	299	0	4	25	6	12	4	1117	2 2	1	34	4 3	1	0
	1 **	20	80							62	<u> </u>				·	
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	"	21	49			7	1	3	3	35			3	0	0	0
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**		$\frac{25}{24}$	12	0	0	2	2	1	0	7	0	0	1	0	1 1	0
	1 11	25		0	0	1	1	1	0	4	0	0	1	1	0	0
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		$\frac{26}{27}$	/ 1	1 0	0	1 0	0	0	$\frac{2}{0}$	1 1	0			0	0	0
	94	29		1 0		1	0	1 0	0		1	0	1 0		0	0
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1Neglo	1 66	20	1	1 0	0 0		0	0	0	1	0	1 0	0	0	0	0
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Mongol.	**	$\frac{21}{20}$	1 1	1 0	1 0	1 0	1 0	1 0	1	1 0	1	0 0	1 0	0	1 0	0
Caucas.	Female	16	1 2	1 0	1 0		0	0.	0		0 0	0	10 0	0 0	0	0
Caucas.	Pennare	17	1 65	1 0	4	3	1 3	1 7	1 1	51	1 0	0	1 3	0	0	0
**	1 44	18	125	1 0	2	1 12	1 4	j /	2	102	1 2	0	5	l 7	1	0
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	1 11	$\frac{20}{21}$	1 14	1 0	1 0	1 0	0	1 2	1 0	1 12	1 0	1 0	0	0	0	0
**	 	22	7	1 0	1 0	0	1 1	1 0	0	6	1 1	0	0	0	0	0
	1 "	23	1 3	1 0	1 0	1 0	1	0	0	2	1 0	0	1 0	0	1 0	0
**	1 11	$\frac{25}{24}$	1 1	1 0	1 0	1 0	0	0	0	<u> </u>	1 0	1 0	1 0	0	0	0
	1 41	$\frac{24}{26}$	1 1	1 0	1 0	1 0	0	0	$\frac{1}{1}$ $\frac{0}{0}$	1 1	0	0	0	0	0	0
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Negro	1 **	$\frac{28}{17}$	1 1	1 0	$\frac{1}{1}$ 0	-0-	1 0	1 1	0	0	0	0	1 0	0	0	0
***	1 '**	18	1 1	1 0	1 0	0	0	0	1	1 0	1 0	0	0	0	1 0	0
TOT	ALS		1054	1 0	1 23	1 95	48	1 . 57	30	824	1 9	1 6	1 79	20	6	1
		1	12077	1 0	1 25	1 77	40) /)0	024)	0	1 / 7	20		

protein is great enough to produce localized necrosis it will do so when a minimal amount is injected. In this series there is a greater percentage of infected males (thirty-three and six-tenths per cent) than females (twenty-seven and three-tenths per cent.) The incidence of tuberculous infection and sex distribution of the infected individuals are similar to those given by Long² for this section of the United States.

Table 2 shows the distribution by counties of the positive tuberculin reactors from this state. The occurrence of a greater number of positive reactors from Riley, Shawnee and other counties is in all probability due to the greater number of students tested from these counties. The positive reactors are in general fairly well distributed throughout the state. There were thirty-three out of state students in the group of positive reactors.

241 or seventy-one and seven-tenths per cent of the positive reactors had chest x-rays and the radiological findings of this group are summarized in Table 3. In this series there was no instance of unquestioned clinical tuberculosis; however, there were suspicious radiological findings in five cases and definite evidence of adult type of tuberculous infection in one case. These six cases who are under periodic observation constitute two and four-tenths per cent of the group x-rayed. According to Harrington³ the clinical tuberculosis rate in the college age period is one in 200 to 500 infected cases. The absence of any active cases in this series, aside from the possibility that some active cases may have been in the group that did not have chest x-rays, is probably accounted for by the comparatively mild course of tuberculous infection in Kansas. This, in turn, may be due to favorable climatic and living

conditions. Hall⁴ has pointed out the fact that Kansas has a relatively low tuberculosis death rate and it probably follows that those who are infected have a mild type which is not so likely to become active.

Of the cases x-rayed 122 or fifty and sixtenths per cent showed evidence of arrested childhood type of tuberculous lung infection and ninety-two or thirty-eight and one-tenth per cent showed no evidence of any form of tuberculous lung infection. Whether or not the individuals in these two groups are more or less prone to develop clinical tuberculosis is still controversial. Myers⁵ and Potter⁶ express divergent views.

TABLE 2

TABLE 2									
	Number of Positive		Number of Positive						
County	Tuberculin Reactors	County	Tuberculin Reactors						
	2		4						
Anderson .	1	Marion	1						
Atchison	1		5						
Barton			1						
	5	Miami	4						
	3	Mitchell							
	1	Montgomery	71						
	2	Morris							
	1	Morton							
	1		1						
Clay	9	Neosho	1						
	7	Ness	3						
Comanche	1	Norton	4						
Cowley	5	Osborne	4						
Crawford .		Ottawa	1						
Decatur	1	Pawnee	1						
Dickinson	8	Phillips							
	1	Pottawatom:	ie6						
Edwards	3		5						
Elk		Rawlins	2						
Ellsworth .			6						
Ford			4						
	1	Rice							
Geary		Riley							
	<u>1</u>		2						
	2		<u>l</u>						
_	1		8						
	3	Scott							
Greeley	_	Sedgwick							
	<u>1</u>	Seward							
Harper		Shawnee							
Harvey Haskell		Sherman							
	5	Smith Stafford	7						
	3	Sumner							
	4	Thomas							
	2	Trego							
Kingman		Wabaunsee	_						
Labette		Wallace							
Lane		Washington							
	14	Wilson							
Lincoln		Wyandotte							
Logan		Out of state							
Lyon									

SUMMARY

- 1. A program of voluntary tuberculin tests followed by chest x-rays of the positive reactors has been instituted for all entering students at Kansas State College.
- 2. The incidence of tuberculous infection in a group of Kansas students of college age who are predominantly from rural districts and small towns is in the same range as that re-

corded for other states in the same geographical

- 3. The incidence of tuberculous infection in the group of entering students tested at Kansas State College, 1936, is greater in males than in females.
- 4. In using the initial 0.00002 milligram dose of purified protein derivative it has again been demonstrated that it is necessary to retest negative cases with a stronger concentration in order to determine tuberculous infection accurately.
- 5. Practically all the unfavorable reactions occurred with the use of the first strength test.
- 6. Kansas students with tuberculous infections came from eighty-seven different counties throughout the state.
- 7. From the group x-rayed there were six for whom periodic observation was advisable.

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DEFICIENCY POLYNEURITIS

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Beri-beri with its associated neuritis has been recognized as a dietary deficiency disease for a good many years. Recently it has been found that a similar polyneuritis, which is also due to a deficiency of some type in the diet, occurs in a variety of other conditions.

The weakness, rapid pulse and cardiac failure associated with degeneration in the nervous system have made the idea of an intoxication of some type appear logical. On the other hand, the close association with reduced or altered food intake and disturbances of the gastro-intestinal tract have suggested the conclusion that a deficiency is the chief cause.

Probably the oldest idea as to the cause of polyneuritis was an intoxication; inorganic acids, such as arsenic, carbon dioxide and oxalic acid have been cited in this connection, also

unknown poisons supposed to be present in

polished rice.

Teruuchi² and his associates have devoted much attention to what has been called the "Oryzation", prepared by alcoholic extraction of polished rice.

It has also been considered that there is some toxin in the so-called "alcoholic" polyneuritis and other conditions, associated with disturbances in food intake, which is similar in its action to that of lead and other metals, but Strauss³ has stressed that the polyneuritis in these conditions is identical with that observed in deficiency diseases. He gave to each of ten alcoholic addicts with polyneuritis, a pint to a quart of blended whiskey in addition to a high vitamin diet supplemented by vitamin B and liver extract intramuscularly, and noted improvement in all, as rapid as in controls.

Proof is practically complete that the polyneuritis of beri-beri, vomiting of pregnancy, and alcohol is due to the lack of vitamin B⁴. Polyneuritis may also develop following post-operative vomiting, operations on the gastro-intestinal tract, colitis, cancer, diabetes, and re-

ducing diets.

The nerve and blood changes in pernicious anemia⁵ are due to a deficiency in the antipernicious anemia factor, and Straucci⁶ says this factor is present in beef steak, eggs, yeast, rice polishings, and wheat germ, and that it closely approximates the vitamin B, or B-1, or anti-pellagric vitamin.

In polyneuritis the pathological changes in the nervous system are a degeneration of the peripheral nerves, and anterior horn cells, and petechial hemorrhages in the brain, spinal cord

and serous membranes.

The clinical findings in polyneuritis once it has developed are quite definite, but there may be symptoms which precede neurological findings for some time, such as loss of appetite, weakness, rapid pulse, tingling and burning of the hands and feet. Glossitis, elevation of the pulse and diminution of vibratory sense are early physical findings.

CASE REPORTS

The following case is an example of deficiency polyneuritis along with considerable other pathology:

A white woman age forty-seven was admitted to the hospital May 31, 1935, complaining of vomiting of one week's duration and abdominal distention for twelve hours. She had cramp-like pains in her abdomen and

had not been able to get her bowels to move with the aid of enemas. She had been operated ten years previously for the removal of an uterine fibroid and had worn a support for her postoperative hernia. She had lost twenty pounds in weight in the past three months. Examination: The patient was fairly well nourished but dehydrated and quite ill. Head, neck and chest were essentially negative. Heart rate 100, blood pressure 110/68, soft, systolic murmur at the apex. The abdomen was markedly distended; there was a large postoperative hernia that could not be reduced. Pelvic examination revealed a firm immovable mass. Her urine was negative. Hemoglobin was 70; red blood corpuscles, 4,100,000; white blood corpuscles, 10,800; Wasserman negative. Diagnosis: Intestinal obstruction, postoperative hernia, and ovarian cyst. She was given I. V. glucose and saline, and operated under spinal anesthesia. Adhesions were loosened, the ovarian cyst removed and the postoperative hernia repaired; one large stone in the gall bladder was not disturbed. For several days following her operation she complained of considerable pain in the region of her gall bladder and vomited several times, but sat up in bed on her thirteenth postoperative day. On her fourteenth postoperative day she complained of tingling in her feet and hands, which gradually became more marked until ten days later she was unable to hold a cigarette in her fingers, due to the pain and sentitiveness of her fingers. At this time she would scarcely eat, had developed a smooth tongue, rapid pulse, extreme sensitiveness of her hands and feet, vibratory sense had disappeared, and knee kicks were very sluggish.

Additional history revealed she had been averaging a pint of whiskey a day for the past year.

She was put on a high vitamin diet supplemented by liver extract and vitamin B, and in spite of this developed a severe dermatitis of her feet, four or five days later, which was very suggestive of pellagra. She has been seen within the last week and all of her deficiency symptoms have disappeared.

Here is a patient who developed a deficiency polyneuritis while under close observation. Several factors probably predisposed but a little more alertness for the early symptoms would have led to a much earlier diagnosis. It is possible to find evidence of nerve involvement as early as seven to ten days on a diet that is inadequate in vitamin B.

A white male age fifty-two, was seen April 13, 1936, complaining of nausea and vomiting of three day's duration. He had lost eighteen pounds in the previous three weeks. He complained of a metallic taste in his mouth, and had a tingling and numbness of his feet and hands. He had been consuming large amounts of alcohol for the past year, recently being able to retain alcohol, but would vomit all other nourishment.

Physical examination: Head, neck and chest negative. Pulse 120, blood pressure 110/70. The edge of his liver could be palpated five fingers below the costal margin and was quite tender. He was tender over the muscles of his extremities. Reflexes were slightly hyperactive. Urine and blood count were normal.

He was put on a high calorie diet with an abundance of carbohydrates and vitamin B extract. He ceased vomiting and his liver began to decrease in size, but his appetite remained poor and one week later he developed severe pains in the muscles of his arms which lasted a few days, after which he has gradually improved.

In this case, in addition to a polyneuritis, he had developed quite marked congestion of the liver which was probably a factor in his developing the neuritis.

The last case is a young man, age twentysix, seen June 25, 1936, complaining of difficulty in breathing, palpitation and tingling and drawing sensation of his hands. Onset had been quite rapid. His appetite had been very poor and he had eaten but one or two meals the previous week and had vomited on several occasions, also being able to retain alcohol when food could not be retained.

Physical examination: He was very apprehensive; his head and neck were negative. Respiration was slightly irregular, pulse 140, blood pressure 102/50. His liver was not palpable, but tender in the right upper quadrant. He was extremely tender over muscles of feet and hands. The reflexes were hyperactive.

On a high calorie diet with vitamin B he showed rapid improvement. He was seen in the office the past week and is symptom free except that occasionally his hands and feet feel like the wind is blowing on them, which may be psychic.

Treatment of polyneuritis is naturally directed toward the administration of an adequate diet. When vomiting and nausea are pronounced, food may have to be withheld for a short time and glucose and saline administered with daily intramuscular liver extract. As soon as possible patients must be put on a high vitamin diet and either brewer's yeast or one of the vitamin B products, of which there are many.

The patient's appetite and ability to take food frequently improves within a few days and along with this a return of strength and diminution of symptoms within a very few days. Vorhaus, Williams and Waterman⁷ have recently reported one hundred cases of neuritis, classified as metabolic, infectious, with anemia, with pregnancy, of unknown origin and with pathological disease, and treated with vitamin B. Eight per cent failed to react satisfactorily; forty-four per cent were symptom free; fortyeight per cent were improved.

CONCLUSIONS

The nutritional background of a large portion of our people is such as to provide for a development of deficiency polyneuritis under a wide variety of conditions.

Marked changes in the diet may decrease the vitamin B complex below the necessary minimum. Alcoholism, intestinal operations, and gastro-intestinal upsets including the vomiting of pregnancy may all serve to develop the disease.

In any prolonged illness associated with loss of appetite, the possibility of the development of polyneuritis must be borne in mind.

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Although John Hunter had studied animal electricity in the torpedo, or rayfish, as early as 1773, the science of electrophysiology had its true beginnings in Luigi Galvani's (1737-1798) experiments on nerve-muscle preparations, which he summarized in 1792, in the famous treatise, "De Viribus Electricitatis in Motu Musculari", on the basis of which constant-current electricity has since been known as Galvanism.—From Galvani Pioneer in Electrical Research, Clinical Medicine and Surgery, September 1937.

THE VALUE TO THE MEDICAL PRO-FESSION AND THE PUBLIC OF REPORTING VENEREAL DISEASES

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There is a law in Kansas requiring physicians to report cases of syphilis, gonorrhoea, and chancroid giving; "the type or stage of the disease, the source of infection, the color, the sex, the marital state and the occupation of the person afflicted with the disease, and a statement as to whether or not the nature of the occupation or place of employment of the person afflicted with such diseases makes him or her a menace to the health of any other person or persons." In reporting the physician need not give the name and address of the patient if he is willing to "assume full responsibility for such conduct of the person afflicted with any of these diseases as will prevent the transmission of infection to others.'

The value of reporting any communicable disease lies chiefly in what is done about the situation after the case is reported. From the information given in a report certain facts are obtained which assist health officers in learning the extent of and in controlling a disease, therefore protecting the public health and welfare. Improper use of reported information by health officers can be a source of considerable grief for any physician and also the patient. Especially is this true in the case of venereal diseases.

We have not yet reached the time when all physicians are willing to give the name and address of their patients suffering from venereal diseases. Since no investigation is permissible under these circumstances of what value is reporting of a venereal disease to anybody? Why put a physician and his staff to this extra time-consuming task when nothing ever seems to come from such reporting?

Reporting of cases even without name and address can be of tremendous importance to every practicing physician and organized medicine from an economic standpoint as well as from a sense of pride in the profession.

Diseases are the problems of physicians and therefore each and every physician is a guardian of the public health. As long as people know that physicians are alert to their duty as guardians of the public health, they will not become anxious or disturbed about some of our dangerous communicable diseases such as the venereal maladies.

At present about eighty per cent of cases being reported are reported by clinics or institutions. Probably only one-tenth of new cases are being reported; but really we do not know how many new cases there are. And so when people ask us how much syphilis there is we can only tell them we do not know. We only have so many cases reported. But the people demand to know. They say, "Is not reporting required by law?" We say, "Yes, but physicians for some reason, perhaps it is because they are too busy and already overworked, do not obey the law. They do not report." It is all we can tell them. This state of affairs does not satisfy a public as interested in their health as they are in this modern age. And so if we do not satisfy their needs they will seek some agency that does satisfy them and you can not blame them.

Let the public get an idea that we are loafing disrespectful, or indifferent to their important health problems and they will not only become wrathful with good reason but certain lay groups will demand that something be done and will even attempt to do something themselves under the leadership of some public spirited citizen. Sometimes this citizen may not have the best interests of physicians in mind. When dealing with diseases we cannot have the best interest of the people in mind if we do not understand that communicable diseases are chiefly problems of the physician. It may not be well therefore for either the profession or the people for such leaders to be forced into service because our profession is not active in assuming a leadership that is theirs by virtue of right and as a duty.

Too many of us are willing to stand by with the attitude that "it can't happen here." In this case by "it" I mean a system of medical practice controlled by groups of people who do not have the best interest of the profession or the public in mind. Call it socialized medicine, state medicine or what you will. We all admit that movements for these systems of practice arise out of needs for medical service which are not supplied. Their unsatisfied needs may be due to the indifference of the profession in some cases and in others to the general contemporary economic conditions of a country which not only cause unrest among the people with regard to their medical problems, but with other problems as well. We cannot do much about the latter situation, but where we can we should set about improving medical service or be able

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with facts to show interested groups that our system is the best that can be had or the best under existing circumstances.

I recently was called upon by the representative of a nationally known organization composed chiefly of lay members but which also has on its roster many reputable physicians. The purpose of our meeting was this representative's desire to instigate a one day educational symposium on venereal diseases open to the public. I was very much interested and suggested that the physicians take the lead in formulating a program. He was not very interested in this suggestion. Apparently he too had once had the profession's best interest in mind and they had not cooperated in a worthy cause. I indicated that I would not be a party to sponsorship of a movement of such vital interest to physicians if they were not almost entirely responsible for this program. He laughed. "Don't be foolish" he said, "The people are interested in this venereal disease problem. You can have a successful meeting without the physicians if they are not interested. In our city we invited the physicians to our first symposium on venereal disease. They did not come, but they soon saw how vitally interested the public was in these things and now they are asking us to put them on the program.'

Unfortunately a public spirited lay citizen was within hearing of our conversation and sensed the content of our remarks. "Well", she said, almost indignantly. "If the doctors aren't interested in this dreadful state of affairs with regard to venereal diseases we will hold our own meeting and find out for ourselves about syphilis and gonorrhoea." This illustrates how the medical profession can be "put on the spot" if we are not alert to our duties as physicians.

Perhaps the representative referred to above had the best interests of physicians in mind but because of the unfortunate lack of interest by the profession in the venereal disease problem he has found that he is forced to "put the cart before the horse" or reverse the proper sequence of events in his activities to control venereal diseases. He knows the people are very much interested. He spurs their interest on to their open declaration of war on venereal diseases. The physicians are then drafted as servants to perform under the leadership of non-professional interests. They have to perform and conform to the wishes of leaders who, because of their ignorance about medical science, impose certain hardships on the physician in a

righteous campaign for a better world to live in. It is a good cause and the physician need not hesitate to assist but unfortunately he should be the leader and not the led. Venereal diseases. like other communicable diseases, are a medical problem. It is admitted by many of us that physicians are notoriously poor bookkeepers. That makes reporting a difficult task for physicians. Until epidemiology can be applied to the venereal diseases to control them, reporting will remain nothing more than bookkeeping. The profession needs the bookkeeping assistance of the state board of health and vet it is as much of a drudge to the board as it is to any physician unless we know we are satisfying a definite need in the medical field. How can this bookkeeping be of any assistance to physicians or the public? Good bookkeeping is essential to any sound business and to most people keeping well is a business regardless of how we of the profession regard it. They demand good bookkeeping. Reporting of veneral disease makes the physician a leader as he should be. Every case reported shows at least that a patient suffering from a venereal disease is probably being properly treated by a qualified physician. Each patient properly treated by a private practicing physician makes one less reason to advocate establishment of free public clinics. It also shows that one physician is taking routine Wassermann tests on his patients and there is no need for establishing more free laboratories for this purpose. It belittles the cry of the need for a Wassermann dragnet to trap people with syphilis.

If every case being treated by private physicians was reported we would have figures at hand to show any interested person that the bulk of people with syphilis are receiving adequate care and treatment, and there is no need for free clinics except those established by organized medicine as they see the need for them.

If the information requested on the reporting blank was given accurately and in full we would have data concerning just who is suffering from venereal disease; what sex, what age group, what occupation group. We would know the economic status of people suffering from venereal disease. We would know the relationship between the group who have the disease and their relative menace to those who do not have the disease.

In other words if we had leadership enough to know the venereal disease problem we would have sufficient leadership to cope with the problem. Leaders are never led. If the physician does not wish to be led or forced into plans for public health which are unsound he must see to it that he as a leader promulgates medically scientific activities which promote public health and welfare.

This of course is a hard task. It involves work, additional work such as bookkeeping involved in reporting diseases, but it is work which creates profitable dividends in the way of an increased respect by the people for a medical profession which voluntarily assumes leadership in doing a duty which is expected of it and which should be expected of it because we have chosen to be physicians and as such we are the guardians of public health.

Do not wait to be goaded into doing your chosen duty. Do not let an unqualified leader, however good his intentions, lead you astray. Assume leadership. Report your cases of venereal disease to the state board of health and let that body working with a committee representing physicians in practice, study the venereal disease situation so that we as physicians to any one who might ask, can definitely say: "In Kansas, we have this situation. We know because as physicians we have studied the problem. From our study we have decided it is best to act thus or so in controlling venereal disease under present conditions. We are glad to have help but we will not be told about these things. They are physicians' problems and we shall treat them as such."

If for no other reason than that the task is a hard one, people will not meddle in a problem which is being adequately controlled. The majority of people do not like work that well, but they do like to play and will play at being physicians if we don't act seriously as physicians. Let us not then report our cases because it is required by law; incidently the law is failing miserably to the extent that it is not being enforced and cannot probably be forced on an unwilling profession. But let us report so the people may know that we are willingly doing our duty, that we know our problems and that we are trying to solve them.

Some of the leaders among physicians have awakened to the lack of leadership in the profession as a whole. Dr. George E. Milbank, when president of the Sedgwick County Medical Society, ably stated the problem in an editorial in The Medical Bulletin of that society. It follows:

"The medical profession has long been

prone to consider public health a thing separate and distinct from the private practice of medicine and as a result the individual practitioner has failed to take the leadership in that field which he has taken in the field of curative medicine. While it is true that many of the problems of the prevention of disease by their very nature demand action by communities or groups, still when we take a broader view of the matter, it will be evident that all of the recent and probably the future advancements in this field will be dependent upon the action of the individual practitioner of medicine. That we have been negligent and slow to cooperate in the past is no reason why we should not assume our rightful leadership and push those measures which are to assume such an important place in the practice of the future. With work to do such as immunization against certain communicable diseases, especially diphtheria, smallpox and typhoid fever, the prevention of chronic diseases through periodic physical examinations, more active work in the prevention of tuberculosis, earlier correction of remediable defects, certainly the field is wide open to the profession. A more aggressive campaign to successfully meet these challenges in a field rightfully ours will prevent many of the abuses now so prevalent and about which we bitterly complain."

In January, February and March of 1936, there were seventy-three, seventy-five and seventy-eight cases of syphilis reported for the respective months. This year there were 105, 137, and 140 cases reported for these respective months.

What does this mean? Prevalence of syphilis increasing? While we have no sure way of telling we can be assured that it means something entirely different. Physicians are meeting the challenge to statements and rumors afloat that the medical profession in general has been ignoring the public health problem of syphilis. This increased reporting does not indicate that doctors are suddenly beginning to do something about syphilis control. They have we believe always done what was possible and sometimes almost the impossible to fulfill their duties as guardians of the public health. Now, however, they are awakening to

(Continued on page 437)

PRESIDENT'S PAGE

To the Members of The Kansas Medical Society:

Vacation time is over. Those of us who were privileged to take a rest and to relax are back on the job, refreshed and ready to go. The beginning of autumn with all its colorful changes stimulates us all to renewed activity. With economic unrest at home and wars and rumors of wars elsewhere, we will have plenty to think about in addition to our interests in the scientific phases of our profession.

On September 6, a meeting of the chairmen of the state committees was held in Wichita to discuss the year's work planned for each committee. Most of the chairmen were present and enjoyed a full day of committee work. Those who were unable to attend will receive an outline of the suggested programs for their committees. I believe the conference was worth while in that the discussion on the projects for each committee was active, alert and constructive.

The members of the Sedgwick County Medical Society are making plans for the next annual state meeting to be held in Wichita in May. I know every effort will be made to make this one of the best meetings we have ever had. It is not too early to begin making plans for a four day layoff from May 9 to 12 so that you can attend this practical and scientific program.

J. F. Gsell. M.D., President.

EDITORIAL

MEDICINE THE EDUCATOR

The Federal Bulletin for September publishes a scholarly essay on "Medicine in Education", by Doctor Max Mason, of the California Institute of Technology. Doctor Mason discusses the role that medicine has played and is to play in general education. He states that he is not thinking of the relatively easy and unimportant process of acquiring technical information and skill. He has in mind the basic problem of the acquirement of mental action patterns in the broad sense; the elimination of superstition and the appeal to authority as determinants for conduct; the recognition of truth in the face of personal prejudice and selfinterest; of applying the objective spirit of the scientific approach to the problems of individual and group living. All of these, Doctor Mason defines, are modes and qualities of action. He brings out the point that such action patterns can not be taught directly, apart from action. He states that to train for these qualities is to increase intellectual power and emotional stability. To possess them is to have a technique of living.

Types of behavior being contagious, Doctor Mason emphasizes the influence of practicing physicians who deal with the emotional stresses and physical ills of their patients. No other profession, he believes, has such an opportunity to educate the public. In no other profession is it so necessary to be objective, scientific, sympathetic and tolerant. This service of education by example demands no conscious effort on the part of the physician. He regards it as a by-product of the service rendered by the medical profession.

Doctor Mason places the responsibility for education upon the medical profession. He states: "The problem of education is that of directing the growth and development, both physical and mental, of the human individual. The science of medicine brings to bear on the human being all of the component sciences

concerned with this growth and development. Since action in this modern world is determined by basic knowledge, it is obvious that those who know, and only those, are the ones to determine action. It is obvious that educational procedures must be based on that body of scientific knowledge which is comprised in medical science."

This is an interesting thought for the contemplation of practicing physicians. It may be suggested that each physician should examine himself as to his objectivity and his scientific approach to the every day problems of his work.

The educated sympathy of the trained physician surely goes beyond technique and is exemplified in a philosophy, the result of knowledge manifest through action.

Henri Amiel, writing in his journal, over sixty years ago, stated that philosophy would have to pass once more through Plato and Aristotle, through the philosophy of "Goodness' and "purpose," through the science of the mind. In this Amiel was a far seeing scholar. The sciences which are the basis of medical knowledge have brought medical practice to a philosophy such as Amiel had in mind, in which is revealed medicine's capacity as a force for civilization.

There is optimism in Doctor Mason's thesis for education through action. The continuation of the application of the scientific method will make available the further understanding of life, and produce action patterns that will increase intellectual power and emotional stability. Through the action of "those who know" must come the dissemination of this knowledge.

MEDICINE AND SOCIAL WORKERS

Dr. John A. Kingsbury, of Milbank Foundation fame, has again been caught out of step with social and medical progress. In an address delivered before the recent National Conference of Social Workers, he endeavored to incite his listeners to a spirit of opposition to or-

ganized medicine. Doctor Kingsbury has a way of saying the wrong thing at almost every opportunity. In this instance, speaking of the need for a comprehensive national health program for the social workers of America, he said: "The social workers must line up against the entrenched officers of organized medicine; they must align themselves beside the leaders of organized labor and beside the real leaders of the medical profession. Together with these groups the social workers of America can bring to pass a real national health program."

If Doctor Kingsbury were a real doctor with an understanding of the social aims of the medical profession, if he possessed the social conscience for the neglected and dispossessed of the population, he would endeavor to direct the social workers into seeking after ways whereby they may secure the cooperation of the leaders of organized medicine toward national health program. Social service as an adjunct to medical service is a comparatively new development which is receiving well deserved recognition. The medicine of the future will come more and more to need the services of social workers. There is a mutual end in view, as has been demonstrated in the work of Janet Thornton and Marjorie Strauss Knauth, in their notable study, The Social Component in Medical Care.

A national health program in keeping with industrial and social development may become a matter of national policy in which all groups interested in the advancement of the social sciences should cooperate. Leadership in the working out of such a program of health must, however, come from the medical profession.

PHYSICIANS AND PATIENTS

On becoming ill, one summons a physician who upon arrival examines the patient, makes a diagnosis and prescribes a line of treatment including medication if necessary. To the average person this appears to constitute the entire transaction, whereas, in reality, a rather farreaching legal contract has been established between the patient and his physician. A better

understanding of this relationship will doubtless prove of value to all parties concerned.

Legally, contracts may be either expressed or implied. The relationship established between a physician and a patient is usually in the form of an implied contract, neither party setting out any specific articles of agreement but both being governed by certain contractural obligations created by the Law and founded upon the relationship of the parties. Consideration of the relationships established through these implied contracts will be taken up under two distinct headings: first, that of the physician to the patient, and, second, that of the patient to the physician.

RELATION OF PHYSICIAN TO PATIENT

Many persons entertain the erroneous idea that a physician must answer any call for professional services that may be made upon him. While physicians rarely decline to give their services to anyone in need of them, there is no legal or moral obligation upon him to do so; he has a perfect right to decline to answer any call or to treat any case. The patient has no more right to compel a physician to attend him than he has to compel any other person to work at his command. When, however, a physician has answered the call he has waived the right of refusal and the implied terms of the contract become obligatory both upon him and upon the patient.

How many visits he is to make and the frequency of these visits is a matter resting entirely with the physician for determination, as the law holds him to continue his attendance upon the case so long as his services are required, unless he gives the patient sufficient notice of his intention to discontinue his services so as to permit the engagement of another physician.

The law requires physicians to use ordinary skill and knowledge, to exercise due care and diligence, to follow established lines of practice, and to use their best judgment in any case of doubt while treating any patient. Under these requirements he must not neglect the patient nor experiment upon him by the use of meas-

ures which are not upheld by a consensus of opinion among members of the profession. "Ordinary skill and knowledge" is that average skill and ability ordinarily possessed by men of his profession in similar localities and under similar circumstances. Under this ruling a surgeon would be held to possess more than ordinary skill and ability as compared with a general practitioner; a specialist would be held to have more than ordinary skill and ability in his special line of work.

A physician is expected to give all reasonable and necessary instructions—both to the patient and to the nurse or attendants upon the patient—for the proper treatment of the particular disease or injury for which he is at the time attending the patient. In this connection, however, a physician cannot be expected to anticipate and advise against some improbable conduct on the part of the patient.

In the treatment of a contagious or infectious disease the physician's duty not only requires him to treat the patient himself, but to employ all proper and necessary means for protecting other persons against the disease.

No reputable physician will contract to cure any patient or even to benefit him. He will do all that his knowledge, skill and experience leads him to believe will benefit the patient and lead to a cure, but when he has done this he has gone as far as human ability permits. The law does not, therefore, recognize failure to benefit or cure a patient as a bar to the physician's recovery of fees for his services.

The knowledge secured by a physician during examination and treatment of a patient, or confided to him by the patient, is always considered as confidential. In many states this is legally provided for under what is known as Privileged Communications. Georgia does not recognize legally such a relationship between physician and patient, but the high standard of ethics governing the profession assures the patient that he may rely upon the physician's confidence just as assuredly as though there were a statute providing for this protection.

RELATION OF PATIENT TO PHYSICIAN

At the same time that the Law creates a contractural relationship upon the part of a physician, it creates a similar implied contract which is of equal force and just as binding upon the patient.

Legally, the patient is expected to receive the physician into his full confidence as regards any matters pertaining to his physical condition, and to give him complete information. It is also a well established principle of law that it is the duty of the patient to follow strictly all instructions and to conform to all orders of his physician. Failure upon the part of the patient to comply with these requirements will relieve the physician of the obligations imposed upon him by the implied contract.

When the patient himself has summoned a physician he contracts to pay for the services he receives. Should the physician have been called by some other party than the patient himself, the acceptance of the physician's services by the patient creates the same implied obligation upon the part of the patient to compensate the physician for his services. Since the Law imposes upon the physician the duty of determining the number and frequency of visits that he shall make in any given case, the law also makes the implied contract upon the part of the patient an obligation to pay for subsequent as well as for the initial visit. Fees for operations, consultations, special examinations such as laboratory and x-rays, nurses and assistants, are also contracted for by the patient, and he is legally responsible for payment.

Under certain conditions other persons beside the physician and patient enter into the implied contract and are legally known as "third parties." The scope of this article will not permit going into detail of these rather complicated relationships. I will only mention that a husband is responsible for expenses incurred in connection with an illness of his wife. A father is responsible for similar services rendered to his minor children. If the father is not living, the guardian (if there be one) or

the mother becomes responsible for services rendered the minor child. — J. R. Garner, M.D., The Journal of the Medical Association of Georgia, July, 1937.

LABORATORY

Edited by J. L. Lattimore, M.D.

CLINICAL VALUE OF PHOSPHATASE DETERMINATION

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Normal serum phosphate in adults is three to four mg. per 100 cc of blood, while in children it is higher and ranges from four to six mg. It is higher in summer than winter, due to the excessive solar ultra-violet rays absorbed from the summer sunshine. Serum phosphate is definitely increased by therapeutic doses of vitamin D in the form of viosterol or cod-liver oil or by use of ultra-violet radiation. Increased phosphate content of the blood is found in Paget's disease, destructive arthritides, osteitis fibrosa cystica, hypoparathyroidism, nephritis with acidosis and in healing fractures. Decreased phosphate is present in rickets, osteomalacia, allergic conditions, hyperparathyroidism and during temporary periods associated with carbohydrate utilization.

Howland and Kramer have shown that the serum phosphate may be normal in some cases of rickets. However in these cases the serum calcium is diminished, usually causing infantile tetany. They point out that if the concentration of calcium milligrams, be multiplied by that of the phosphate milligrams, a figure results of from fifty to sixty in a normal child. When the figure falls below thirty, rickets is invariably present, when the figure is above forty, either healing is taking place or rickets has not been present.

There is a very definite relationship between calcium and phosphorus metabolism. When the diet is excessive in phosphates in proportion to the calcium, an insoluble tertiary calcium is formed which is not absorbed. The same is true when excessive amounts of fatty acids are used in the diet. Phosphates are absorbed from the intestine and an acid medium in the upper intestine aids digestion while an alkaline medium reduces absorption.

Phosphatase is an enzyme, secreted by osteoblasts and hypertrophic cartilage cells and its function is to hydrolyze or break down phosphoric esters (glycerophosphates and hexose phosphate) into inorganic phosphates, resulting in the precipitation of insoluble calcium. The usual clinical way of reporting is in terms of phosphatase activity, but this is determined by determination of phosphate. The enzyme phosphatase is present in the intestional mucosa and kidney in large amounts. To measure this enzyme activity, probably the Bodansky¹ technic is the most dependable. This technic requires at least four cc. of serum. His values for phosphatase in adults is one and five-tenths to four units and in children it is three and onetenth to thirteen and one-tenth units. The test requires very close detail work. More recently, Woodward² has described a modification, which somewhat simplifies the calculations in-

Clinically, the test has especial value in the diagnosis of rickets, Paget's disease and the differential diagnosis of obstructive jaundice. Morris³, basing his studies on the examination of 506 children under two years of age, suggests that a rise in plasma phosphatase is an earlier manifestation of the rachitic process than any provided by ordinary clinical and roentgen examination. A rough parallelism was found between the height of the phosphatase and the severity of the rachitic process. In untreated cases, the serum phosphatase continues to rise. Administration of vitamin D in sufficient dosage prevents further rise and causes a decrease within two to three weeks. Large doses should be given for the first month, followed by the ordinary dosage, otherwise the serum phosphatase is greatly delayed in returning to normal.

Paget's disease shows a very decided increase, very often going as high as thirty to forty mg. The bony changes often observed in hyperparathyroidism may simulate those of Paget's disease, however the serum phosphatase is much lower than that found in Paget's disease.

Obstructive jaundice gives a very high phosphatase, usually from twenty to forty mg. In other types of jaundice the phosphatase is only slightly elevated, usually it ranges from four to eight mg.

The acidosis associated with infantile diarrhea is due more to the deficiency of phosphorus excretion than to the presence of acetone bodies.

To date, there has been no standardization of what actually constitutes a unit of phosphatase, so it would be necessary for the physician to know what method is used or to know the unit basis used as standard. The determination of serum phosphatase by methods now available is not a direct measure of the enzyme, but a measure of its activity in hydrolyzing phosphoric esters.

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3. Morris, Peden, Stevenson and Small. Significance of Plasma Phosphatase in Diagnosis and Prognosis of Rickets. Archives of Diseases of Childhood, London, 12:1-70 February 1937.

TUBERCULOSIS ABSTRACTS

A review for physicians prepared monthly by the National Tuberculosis Association and published through the co-operation of the Kansas Tuberculosis and Health Association and The Kansas Medical Society.

TRANSIENCY—A PUBLIC HEALTH MENACE

At least one type of citizen in the United States stubbornly defies regimentation, classification, or control. He is the tuberculous transient who has come west seeking a climatic cure, exhausted his resources and now wanders from place to place on foot, on brake rods, or in a dilapidated auto. In jungles, shacks and flophouses he pauses when he must. He has lost his claim as a resident of the home town he deserted, and is not welcomed as a resident elsewhere, since he is regarded as a "bum" without visible means of support, but with a very visible need of relief. He is not, in the main, getting well of his consumption—salubrious climate notwithstanding. In many instances he is accompanied by his worried wife and half-starved children. Worst of all, he is a prolific sower of the seed that causes tuberculosis, for even the respectable, cautious resident cannot escape contact with him directly or indirectly at the filling station, restaurant, tourist camp or lodging-house.

No census has been taken of tuberculous wanderers, but a conservative estimate, based on observations of transient officers, is that their number exceeds 1,000 in the states of Colorado, Arizona, New Mexico, western Texas and southern California. This number, however, includes only the obvious consumptives—obvious, that is, to the non-medical social worker.

If a more thorough and precise case-finding search were made, including x-ray examinations, the army of indigent tuberculous in the Southwest would doubtless exceed 5.000.

Sooner or later these wanderers will lose their legal residence acquired in the communities whence they came and very many of them will not gain citizenship in a new locality. Opportunities to earn a livelihood are scanty or nonexistent. Indigence is added to their invalidism and with no settled residence they are nobody's responsibility. This is calamity enough for the unfortunate victim, but it is very bad in another sense. In his extremity the patient moves on, perhaps crossing state boundaries, but surely spreading his disease in the new regions he visits in the hope of finding some relief.

The recent business depression has noticeably aggravated the problem of the migrant tuberculous. Failure to make a living at home has started a vast number of new transients on the road, many known and occult cases of tuberculosis among them. At the same time state and community resources for public health and welfare work have dwindled.

Recognizing the gravity of this situation the National Tuberculosis Association called a conference last year at Santa Fe to which public health and welfare workers from the Southwestern states were invited. The conclusion reached was that the problem was too great for solution locally and the recommendation was made that organized federal aid be requested.

Already the Emergency Relief Administration had provided its transient shelters, hastily constructed concentration camps set up in an effort to "freeze" the army of aimless wanderers. Provision was made for those who were ill, and of this number about a third were found to be suffering from tuberculosis. These were segregated and heroic service was rendered by local doctors and all available nurses working under serious limitation because of inadequate room and equipment.

Hard times will always emphasize the problem of the sick, indigent, homeless transient, but the problem itself antedates hard times and will persist through prosperous ones as well. The menacing public health aspects of the situation are still to be faced. The medical profession can render incalcuable aid toward lessening this evil by damming up the transient stream at its source. The advantages of certain climates in the treatment of pulmonary disease are readily admitted. But climate is only one of the essentials in recovery from pulmonary tuberculosis and by no means the most important. Comfortable living, with rest, peace of mind, adequate nutrition and skilled medical care are the prior requisites. If physicians will preach these doctrines in their communities as well as to their patients the melancholy hegira of unsuitable cases will diminish. If they will with insistence point out the increasing provision of excellent sanatoria near at hand in their own localities, at the same time demonstrating the growing percentage of arrested cases discharged from these institutions, they will make a contribution to public health protection of genuine significance.

But the tide will recede slowly and meanwhile there is the army already enlisted in this great migration. How to prevent its continuing to spread disease is a question that is perplexing the most experienced health and social workers. Forcible detention is in bad odor—tuberculosis is not yet regarded by the public as seriously as leprosy, for example. Deportation to point of origin would not solve the larger problem and for some patients who have the fixed idea that their lives depend upon living in this or that climate, it would be inhumanly cruel to send them home, wrong though they might be. To erect sanatoria in resort areas would result in luring persons from all parts of the country, and thus aggrevate the evil. Families would come with them and, not being eligible as patients, would be dumped upon the mercy of social agencies in cities and towns nearby, already swamped with appeals from their own people.

One proposal made is that colonies be established in the great open spaces for entire families. But the states where they would be most likely to settle are least able to support such an enterprise and the federal government can hardly be expected to finance it, at least not until the broad problem of transiency is tackled through sweeping legislation such as that proposed in the Trammell-Wilcox bill recently before Congress. Self-supporting of such a colony is a fatuous hope, and it seems unlikely that many families would consent to be herded together in that manner. And if such colonies, because of good management and by providing attractive living conditions should succeed, we would again be confronted by the problem of preventing the influx of families from all over the country who had better remain where they are.

At present the United States Public Health Service is studying the situation to see what fa-

cilities are available. The situation is probably not as hopeless as it might have been a few years ago. One advantage is that the country generally is now better equipped to care for its tuberculous residents near at home. Another advantage not to be had a few years ago are modern weapons that are now used to combat tuberculosis. Isolation of the carriers in sanatoria is, of course, the crux of the situation, but there are also new developments in diagnosis and treatment which make the control of tuberculous transients, even in the absence of adequate beds, more workable than some years ago. For example, collapse surgery enables the otherwise bedridden patient to carry on light work, and this treatment also renders him bacillus-free which means that he promptly ceases to be a danger to others. Fifty per cent or more of all tuberculous patients can be successfully "collapsed," and so-called ambulatory pneumothorax treatment is now an accepted procedure. There are furthermore better methods of casefinding. It would not be Utopian to propose that all transients be x-rayed, which would lead to the discovery not only of obvious cases, but also of those in the earlier stages who by prompt action could soon be restored to health.

"No home is safe until every home is safe," is an old slogan used by tuberculosis associations. Until we have come to grips with the tuberculous transient, we cannot hope to guarantee safety to the rest of American citizens.

Sick, Broke and Footlose, H. E. Kleinschmidt, M.D. The Journal-Lancet, Minneapolis, April, 1937.

MEDICAL ECONOMICS

Edited by O. W. Davidson, M.D. of the Medical Economics Committee

The following article was prepared, upon invitation of this section, by Dr. T. C. Kimble of Miltonvale. Dr. Kimble is a member of the legislature and was one of the co-authors of the Kansas Public Welfare Law passed in the last session.

SOCIAL WELFARE

Centralization of government and decentralization of administration are the basic principles and ideals of a true democracy; basically, Americanism. Centralization of government and centralization of administration are the basic principles of Sovietism, Nazism and Fascism. Decentralization of government and cen-

tralization of administration is basically bolshevism; the destruction of all government—mobrule.

The United States in her social legislation must choose between these three widely different, basically variant ideals. What is the ultimate goal which we seek to achieve? Shall we choose democracy, a continuance of those ideals which our forefathers so wisely established, and which each generation has so wisely continued, or shall we strive for some of the "isms" that have been demonstrated to be the eternal destruction of the individual, subjugating the wills and the lives of the people to a dictator? Or shall we have a "Burselius Windrip" and mob rule? If either a dictator or a "windrip" then we must take up those plans already outlined and fairly well perfected by the "Social Worker". If not, let us not play the ostrich and take no cognizance of the present trend but firmly and constructively take a definite stand. Let us offer a feasible and workable solution to the centralized administration of the social worker by decentralization of the administration and thus save America for democracy.

In most of the discussion of this Social Service Act the arguments are basically wrong. The Social Worker says let us not only have the government of this Act in Washington, but let us have the administration there, also. The medical man says let us have the government centralized, but let us have the administration in as many units as there are communities.

The social worker sees the forest but not the trees; humanity but not the humans. He forgets, in his ultra social sphere that were it not for the trees the forest would soon be gone; were it not for the individuals humanity would fade from the face of the earth.

The forester sees the trees, the contours and the terrain. Each tree is put in its place, adapted to its soil and its environment. The nurslings are provided with their needs, properly trimmed and treated for disease. Out of it all he obtains a perpetual forest; a thing of joy and beauty forever.

The medical man sees the human, the individual, in all his physical, moral and mental imperfections. He strives to correct his physical defects, goes with him even into the "Shadow of the Valley of Death". He corrects the inroads of disease, and with his wise advice, counsel and treatment, endeavors to stay the hand of the Boatman who awaits to pilot them through the Stygian Darkness, to possible

brighter shores. He stands by the mother in travail and rejoices with her in the birth of her child; soothes her mental anguish; relieves her physical pain; counsels her and guides her through the infancy of her child. Then he takes up the physical and the mental life of the child and is again the wise counselor and guide until a healthy and normal adult is matured. And yet, the social worker says that he has no place, except that of a regimented hireling, in the scheme of Social Security. Is not the man who has fought death and won, more capable and does he not have more knowledge of the utmost needs of the individual in every phase of his life than the one who does not see the individual except as he is just another "case" upon which his salary may be increased? Will he not build a better, more perfect humanity? One that is self-perpetuating, evoluting into a happy, effective, harmonious society—Humanity in its Nth degree?

The Kansas Social Security Act is both practical and idealistic in its contents. It eliminates the social worker as such. It places the administration in the hands of those who should be most capable of administering it. It centralizes the government and de-centralizes the administration. In its scheme there is no place for the social worker, as such. We even went so far as to disband the K.E.R.C. This was not done on the 'spur of the moment', but only after mature deliberation and research. We spent many weary days and nights in study of the federal act; in hearings and consultations. We had conferences with members from other states who had tried out their social security acts and failed financially. In each instance, their failure was in direct proportion to the centralization of administration and the degree of control of the social workers. The cost of administration and the amount of aid received by the various classes of recipients was in direct proportion to the degree of control of the social worker. The greater the control of the social worker the greater the percentage of cost of administration—the less the recipient received.

There was never a more perfectly social-worker-controlled act than was the K.E.R.C. It cost seventy-one per cent of the value of the "commodities" to distribute them. It cost twenty-one per cent to administer the relief that was given in cash. Apparently, no thought was given to the actual need of the recipients. When reproached for their lack of consideration

of the actually poor and needy their pet answer was, "Oh, they have that "poor stink" and I can't stand it to be in their home long enough to inspect them". But they can write reports and add names and draw their pay, and thus take from the needy the necessities of life. They can and do sit in their offices in Washington and translate Russian Communism and attempt to transplant it on to American life. The real social worker is not only un-American but he is also anti-American. His only useful place is in some dictator controlled country. He should be sent home.

The 'Kansas Act' specifically says that the recipients shall receive aid in accordance to their needs. It is not a pension. It is a superpension. Who can actually tell the exact need of each succeeding month? In evaluating these needs one must take into consideration many factors; food, clothing, housing, medical care, recreation, social status, vocation and avocation. All these might be mentioned as among the important considerations. This means actual month to month inspection by some one who is able to see and who is competent to judge of their needs. The negro who is accustomed for generations to his cabin; the executive who has lost all, but is accustomed to real food and housing, must each be judged according to his needs, and compensated accordingly.

The Kansas Act makes it obligatory upon the Welfare Board, both state and county, to care for the medical and surgical needs of the recipient. This, again, was not a spontaneous act. It was a conclusion arrived at after many consultations and hearings. After we found that in many of the states which had enacted the social security act and had failed in their attempts to get the actual needy cared for, we were unanimous in one thing: i.e., that it was largely due to the fact that they had not taken into consideration the sick and health problems of the recipients. Even those who were in control in Washington said that without proper and due consideration of these factors, any social security legislation was largely a failure. So the sub-committee which formulated our law, considered this and placed it in our act, but left the actual method to be worked out, largely because they did not feel competent to do so. Also because they felt that it was a problem on which medicine should be consulted and that the actual details could only be perfected after much study and consultation.

This medical factor is a serious one. When we consider that fifty-one per cent of all relief is basically either health or direct medicine we will realize that it is much the most serious and important individual factor in the group. What are we going to do about it? Is organized medicine going to again play ostrich and force our Social Welfare Board to do something in an entirely unsatisfactory way just because we fail or refuse to co-operate? There may be many effectual plans and each county society should be studying the situation in its own county and be ready to offer some constructive suggestions.

Personally I would suggest that it be done in something of the following manner.

- 1. A Medical Director in the office of the State Welfare Board.
- 2. Experienced, trained nurses as part of the county setup.
- 3. Have the County Medical Society appoint a committee who is responsible to both the County Welfare Board and the Medical Society to whom these nurses are to report and to whom they are responsible.
- 4. Make this committee directly responsible to the County Board for the expenses incurred to curb any tendency toward overcharging on the part of any physician who cares for these recipients.
- 5. Have the committee make a survey of county work done and also that work done by other physicians by a regular county staff, in the county where the physician has not heretofore been paid.

This latter has been an unfair tax upon every physician in Kansas and should be eliminated. We pay as much tax to care for the needy of our various counties as any other taxpayer in the county and this has been an added burden upon our finances and should be stopped.

Of course this must be elaborated upon and co-ordinated by and between the county and State Welfare Boards as well as with the federal act. But after all it is a medical problem and can only be successfully answered by the constructive co-operation of medical men with the welfare agencies.

FOUR CAUSES FOR DELINQUENT ACCOUNTS Why do some medical bills go unpaid?

There are four common causes of delinquency on the part of patients in paying their doctors:

- (a) Simple Inertia: Some people put off paying any bill until pressure is applied,—however capacious their checking account may be.
- (b) An Overloaded Budget: Many people (some of them on fair-sized incomes) have a budget that allows for little or no reserve for contingencies. Any unusual, unbudgeted item is naturally put aside, awaiting some windfall; and the longer such a bill is on a sidetrack, the less the conscience is troubled to keep it there.
- (c) Genuine Incapacity to Pay: Occasionally a family is forced to contract an obligation which cannot possibly be paid in any manner within any reasonable period. . . . But few people will keep such a bill in their files for long without at least making an effort to have the gross amount of it adjusted. Few such claims just become delinquent without protest.
- (d) Pernicious Irresponsibility: These are the "dead beats",—a very small class proportionately (although reported by some experts to be rather more prolific in Westchester than in most other regions of the country).—Westchester Medical Bulletin.

THE VALUE TO THE MEDICAL PROFESSION AND TO THE PUBLIC OF REPORTING VENEREAL DISEASES

(Continued from page 42)

the fact that it might be well for them to cast aside their modesty about letting the public knowwhat physicians are doing in the way of publicwelfare and bring their light from under the bushel. This reporting merely puts the physician on record as performing his duty.

In this era it almost seems necessary to let the world know you are doing your duty. No one takes such things for granted any more. If we lived a thousand years we might plod along without advertising our good deeds and finally without being on the records anywhere, except perhaps in the golden book, our righteousness would come to light. But our life is too short and fast. If we don't have proof of our accomplishments some rascal comes along and with his braggadocio air has the unwary public believing that he is the public spirited citizen who is protecting the welfare of the

people in spite of the fact that he in truth is just another leech. As a result the people suffer and also those who would in a righteous manner serve their fellowmen are not given credit, but instead are accused of being negligent. Of course those physicians who are carefully attending each case of syphilis so as to cure the patient and protect the public will get their reward in heaven. In the meantime if ethical physicians do not put their good deeds on record they and the people both will suffer until they go to heaven.

Every case of syphilis reported is record and fact of a case receiving proper treatment. Few physicians would bother to report a case if they did not sincerely wish to see that the patient gets proper treatment and care. If physicians can give proof through the state or local health department that they are properly caring for the public health there can be no hue and cry from non-medical individuals or groups demanding that something be done about this or that health problem.

Control of syphilis is for the most part a medical problem. It can be kept in the hands of physicians if they will keep books to prove that they have the situation well in hand. Reporting your cases furnishes this proof. It costs you little and if you are interested in your profession the returns are big.

MEDICAL LITERATURE

Edited by Will C. Menninger. M.D.

TRAUMATIC SUBDELTOID BURSITIS

There are one hundred forty bursae in the body: thirty-three in each of the upper extremities and thirty-seven in each of the lower extremities; the subdeltoid is most often affected and the subacromial next.

An intelligent approach to the treatment must consider the pathology of the three stages of bursitis—acute, subacute, and chronic.

In the acute stage, the cardinal signs of inflammation are present. The bursa is distended by fluid; there is hyperemia and edema of the tissues surrounding it, producing pressure upon the neighboring structures, which is a factor in producing the pain. Treatment in the acute stage consists of cold applications or ionization with magnesium sulphate. The purpose of the cold compress is to decrease oxidation and heat formation thereby combatting the formation of

edema. The cold applications are applied in the form of compresses wrung out from ordinary tap water and applied to the shoulder and is kept constantly wet by the patient. The compresses are kept in place by a spica bandage. The compress is changed daily and kept up for a week. The wet dressing may be combined with massage. One per cent magnesium sulphate may be applied by ionization to the affected shoulder to relieve intractable pain or edema; treatments given daily, if necessary, for twenty to thirty minutes.

In the subacute stage, fibrous adhesions form or are present in the bursa, nearby tendon sheaths and between adjacent muscles causing definite mechanical hindrances to abduction and rotation leading to muscle atrophy. Treatment consists of infra-red radiation and massage alternated by ionization with sodium chloride followed by sinusoidization. The sodium chloride on the negative pole produces a dissolving action on the fibrous adhesions and the sinusoidal current serves as a marvelous massage for the atrophied muscles.

The chronic stage either shows the protracted adherent variety in which the x-ray findings are negative or the form of calcified subdeltoid bursitis. The treatment of the former is essentially the same as the subacute stage. The treatment of the calcified variety by the writer consists of diathermy applied to the affected shoulder at 800 M. A. for thirty to forty minutes. Twenty to forty treatments may be necessary for cure.

Echtman, Joseph, M.D.: Traumatic Subdeltoid Bursitis: Treatment By Physical Medicine: New York State Journal of Medicine: 36:503-506, April 1, 1936.

TONSILLECTOMY

This is a follow-up study of 104 cases of routine adenoidectomy and tonsillectomy which were reported by the author in April 1935. At that time he correlated the history which induced the patient to be operated upon with the pathologic changes in the tonsils. This report covers the correlation of these factors and the subsequent clinical course over a period of eight months. From this study it appears that in a routine group of patients the percentage of persons who give evidence by history and (or) clinical examination of infected tonsils should be between eighty-five and ninety. In this series the microscopic examination of the slides revealed eighty-six per cent to have had tonsils with a pathologic change and fourteen

per cent to have had normal tonsils. Tonsillectomy and adenoidectomy have proved beneficial in cases in which a focus of infection was suspected in the tonsils and in which there was a history of recurrent colds and sore throat, aural involvement, nasal obstruction, cervical adenitis, and enlarged tonsils. The procedure seems to be of questionable value in cases of indigestion, laryngitis, and pain in the throat.

Smith, Harold D. Follow-Up of Patients 8 Months after Tons: Hectomy. Archives of Surgery 24:488-494, October 1936.

ELECTROCOAGULATION OF THE GALLBLADDER

Thorek presents 213 consecutive, unselected patients who have had electrosurgical obliteration of their gallbladder without mortality. He performs the usual operation of removing the gallbladder; he then electrocoagulates the remaining posterior wall of the gallbladder, or the gallbladder bed if the gallbladder has been entirely removed, to avoid bile seepage. Experimental studies show that electrocoagulation results in an occlusion (by coalescence) of the walls of the capillaries and bile ducts and in the formation of a dry, sterile layer of tissue. Unlike electrocoagulated surfaces exposed to the air, such areas within the abdomen, in the absence of infection, do not slough, do not bleed, but become encapsulated and finally resorbed. Thorek has equal success using the current from the conventional diatherm or the short wave machine. The article is closed by giving a detailed procedure of the operation and with an analysis of his cases. The ligamentum falcimore hepatis is used as a pedicled or free graft in covering over sutured or raw surfaces to great advantage, thus reinforcing and protecting the areas concerned against seepage and safeguarding the processes against repair.

Thorek, Max: The Rationale Of Electrosurgical Obliteration Of The Gallbladder: A Clinical Study Of 213 Consecutive, Unselected Cases Without Mortality: The Pennsylvania Medical Journal: 39:10:759-765: July, 1936.

OSSIFICATION

Bisgard cultured tissues in the anterior chambers of dogs and rabbits. The tissues were cultured with direct vascular communications so that they received minerals, hormones, etc., in addition to nutrition, and by their vascular attachments they were suspended in a fluid which normally consists almost entirely of water. These tissues cultured in neutral medium

served as controls for comparison with identical tissues cultured in aqueous surcharged with either bone salts or bone ash. Tissues known to be osteogenic, such as bone and periosteum, gave rise to new bone and no differences in time of beginning of ossification or in quantity or quality was demonstrated in the two types of cultures. Bone devitalized by boiling was found not to be inert. Fibrous tissue such as that present in the sheath of the rectus muscle failed to either calcify or ossify. No bone was found in three series of eyes used as controls, namely, those in which bone salts only were injected, those subjected to operative trauma only and those in which infection had caused extensive destruction and fibrosis of the interior of the eyes. The author concludes that, in experimental animals: (1) The synthetic salts of bone, calcium carbonate, calcium phosphate, and magnesium phosphate, have no influence on osteogenesis or ossification. In great concentration and in the presence of tissue not in itself osteogenic but recognized as ossifiable, these salts failed to give rise to the formation of bone, and in the presence of osteogenic tissue they appeared not to alter the normal course of ossification. (2) Bone, regardless of viability, has a favorable influence on ossification. This was true of partially viable bone, boiled bone, and bone ash.

Bisgard, J. Dewey. Ossification. The Influence of the Mineral Constituents of Bone. Archives of Otolaryngology 33:926-939, Dec. 1936.

PREMATURE INFANTS

Wilcox presents a review of the current methods of care, treatment, and feeding of premature infants born in the Sloane Hospital for Women as observed from September 1, 1929 to August 31, 1934. Among 10, 163 consecutive births during this five year period, 330 infants weighing less than 2,500 Gm. were born. The author believes that the weight or length of the infant at birth is a much more accurate and satisfactory method of evaluating immaturity than the period of gestation based on the mother's history. He found that there was a tendency to greater susceptibility to disease and toward a higher mortality rate in premature infants receiving little or no breast milk after the first ten days of life; that 58.5 per cent of the series were girls; that the mortality rate for the group was 28.5 per cent and the corrected mortality rate for those who died in the hospital after seventy-two hours was 4.4 per cent; that the mortality rate was higher among boys; that prematurity per se was the most common single cause of death with injury sustained at birth the next most common in infants weighing less than 1,500 Gm. and infection the next most common in infants weighing more than 1,500 Gm. at birth; and that premature infants weighing less than 1,500 Gm. at birth tend to develop more slowly at first than those weighing over 1,500 Gm. at birth, but they tend to approach the average weight of mature infants by the age of six months.

Wilcox, Daniel A. A Study of Three Hundred and Thirty Premature Infants. American Journal of Diseases of Children 52:848-862, October 1936.

EFFECT OF SHORT WAVE THERAPY ON EXPERIMENTAL TUBERCULOSIS

Schliephake reports marked sensitivity of tubercle bacilli to ultra short wave therapy: tubercle bacilli exposed in a condenser field of a 4.8 metre apparatus at 53 degrees C. were killed within ten minutes. Schedtler treated fourteen cases of pulmonary tuberculosis and dry pleurisy with ultra short wave and obtained favorable results. In six cases of wet pleurisy, most of them of tuberculous etiology, this treatment never produced prompt cessation of the exudation but four refractory cases led to resorption and adhesion, while in two other cases the treatment remained ineffective.

The authors treated ten tuberculous guinea pigs with a six metre wave-length (150 Watt) Falconer Transtherm. Three different modalities were used: (1) General condenser field: three animals. (2) Local condenser field: four animals. (3) Electromagnetic field: three animals. An average of two treatments was given per week to each animal over a period of three months. Each animal received 20 or 21 treatments of ten minutes each.

After three months the animals were killed as well as the controls. At autopsy the two groups of animals showed no striking differences in involvement. In this series no difference appears in the progress of tuberculous infection between animals which had a higher heating and those which did not.

The results of this experiment support the opinion of Schedter that the eventual beneficial effect on human tuberculosis is apparently due to the hyper-aemia and heating rather than to any specific action; however the number of

animals treated is too small to warrant any generalization.

Kling, David H., M.D. and Rubin, Henry M., M.D.: The Influence Of Radio Ultrashort Wave Therapy On Experimental Tuberculosis In Guinea Pigs: The American Review Of Tuberculosis: 34;4;498-504, October, 1936.

Leland F. Glaser, M.D.

THE VALUE OF DIFFERENT HEATING APPLIANCES IN PROSTATIC INFECTIONS

Raising the temperature of the prostate has definite theraputic value. The value of any type of heat producing equipment must not be judged by its ability to cure, but only by its ability to produce heat. The author states the results of trial of several different types of heat producing machines. The charts of temperatures produced were constructed by a curve-drawing potentiometer, connected to a thermocouple placed in the posterior urethra during treatment. The following results were obtained:

Hot Water Thermophore: water at 122 degrees F. was sufficiently hot to burn the rectum but did not change the temperature of the posterior urethra.

Bransford-Lewis Heater: no elevation of temperature in posterior urethra.

Elliot Machine: in thirty minutes time the temperature rose to 98.8 degrees.

Radio Frequency: an insulated electrode was inserted in the rectum with a condenser pad applied externally and this method was absolutely impractical because of intense heat produced within the orifical electrode itself, almost immediately burning the rectal mucosa. When two condenser pads were placed externally, it was possible to show an elevation of about one degree.

Diathermy: with pads over buttocks and over the lower abdomen, using as much as 5000 M.A., there is practically no indication of deep heat. By using a special designed water-cooled rectal electrode, a temperature of 115 degrees F. was attained; when using this water-cooled rectal routinely, temperatures of 109-112 degrees F. could be maintained as long as desired.

Herring, James B., M.D.: Heat Producing Appliances: Their Comparative Value In The Treatment Of Prostate Infections: California and Western Medicine: 45:2:140-144, August, 1936.

Leland F. Glaser, M.D.

HISTAMINE IONOTPHORESIS IN RHEUMATIC CONDITIONS

The authors present a series of 259 patients with various affections of a neurogenic, vascular, arthritic and rheumatoid character, showing a ratio of cure or improvement to fail-

ures as being three to one, such as vasospastic conditions,, Buerger's disease, myositis, subacromial bursitis, tenosynovitis, brachial neuralgia, rheumatoid arthritis, G. C. arthritis, osteoarthritis, and spondylarthritis. Over twothirds of the patients noticed marked relief of pain and increased motion of the affected part immediately after a treatment was given which was enchanced as more treatments were given. A 1-2000 solution of histamine for smaller areas was administered by ionotophoresis (1-3000 solution for larger areas) for five minutes per treatment with a concentration of current not to exceed one-quarter to one-half milliampere per square inch of electrode surface. Multiple electrodes may be used to treat several areas at a time. The authors especially stress the improvement of soft tissue affections after histamine treatment.

Mecholyl ionotophoresis was found to be inferior in its action on the capilleries and arterioles. It needs more than ten times as high a concentration of the solution and several times as long a concentration of current and duration of treatment. It also has its drawback of alarming systemic reactions.

The authors have written an excellent article and could be profitably studied both for their technic and results obtained.

Kling, David, M.D., and Sashin, David, M.D.: Histamine Ionotphoresis In Rheumatic Conditions And Deficiencies Of Peripheral Circulation: Archives Of Physical Therapy, x-ray, Radium: 18:6:333-338, June, 1937.

Leland F. Glaser, M.D.

ULTRAVIOLET RADIATION OF ERYSIPELAS

Jenkins reports fifty consecutive cases of erysipelas treated with ultraviolet; twenty-five had only one treatment, the temperature returning to normal in two days; thirteen had two treatments, the temperature returning to normal in an average of three and eighty-four hundredths days. The remainder had three or more treatments. Nineteen had a temperature of 103 to 105 degrees F. and fifteen had a temperature of 101 to 103 degrees F. One patient died, giving a mortality rate of two per cent. In comparing the results of treatment of fourteen other cases treated by other methods, the average duration of fever was eight and four hundredths days as compared with three and three hundredths days of fever when given ultraviolet. The benefits derived from ultraviolet therapy to erysipelas are more rapid reduction of temperature, freedom from pain in the majority of patients after the first treatment, shorter hospitalization, and lower mortality rate.

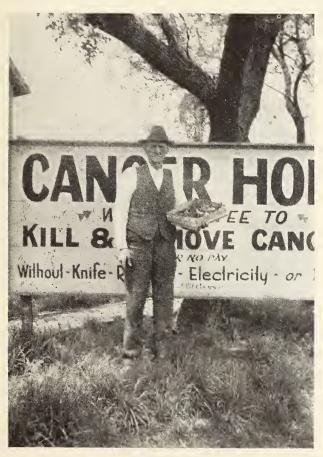
Jenkins, J. G., M.D.: Ultraviolet Radiation Of Erysipelas: Archives of Physical Therapy, x-ray, Radium: 18:6:363-365, June, 1937.

Leland F. Glaser, M.D.

NEWS NOTES

COOPER ENJOINED

At a hearing in Fredonia on September 20, Judge J. T. Cooper of the District Court of Wilson County enjoined W. W. Cooper, cancer specialist of Altoona, from further practice of medicine and surgery.



W. W. Cooper

The case, which was filed by Mr. Theo. Varner, Assistant Attorney General, was brought under the injunction law passed by the last session of the legislature and presents a typical situation which this statute was intended to correct. Cooper, who holds no healing license, has been treating cancer patients with a zinc chloride paste which he formerly claimed was a secret formula, but which upon being confronted with a chemical analysis of the product, he admitted was a well known and more or less obsolete medical remedy.

Cooper's main attorney was E. M. Perdue, of Kansas City, Missouri, who is a combination doctor of medicine and lawyer and who is a frequent lecturer before cult organizations.

Perdue's participation in the case is alleged to have been financed by a group of chiropractors and other drugless healers, whose interest in a case involving drug therapy was at least unusual. The defense he presented on behalf of Cooper rested mainly on the belief that any person should have a constitutional right to attempt to heal people if he thinks he can do so.

Mr. Varner handled the case on behalf of the state, and Dr. J. G. Hughbanks, Independence, served as expert witness for the state. Most interesting evidence presented at the hearing was the answers by Dr. Hughbanks to unorthodox medical questions asked by doctor-lawyer Perdue. Other witnesses for the state were: Dr. J. F. Hassig, Kansas City, Secretary of the Board of Medical Examination and Registration; Dr. C. H. Ewing, Larned, former Secretary of the Board; Mr. G. N. Watson, chemist, Independence; and Mr. Raymond Tice, Kansas City.

Publicity, a Wichita weekly newspaper and foremost mouthpiece of chiropractic in Kansas, made the following comment concerning the case:

Cooper Cured Cancers

W. W. Cooper, of Altoona, 86 years of age. though not an M.D. evolved a remedy that has proven an absolute cure for cancer, and many living witnesses are ready to voluntarily so testify to the effect that the treatments rendered by this man DID cure them and thereby relieve them of that intense bodily pain that only a cancerous condition can affect.

Well, not-with-standing the great good this grand old humanitarian has done a suffering humanity he was arrested for administering relief to his fellowman without permission of the associated medico's.

His trial was called in district court at Fredonia last week, with Dr. E. M. Perdue, 45A E. 32nd St., Kansas City, Mo., as his defense attorney, supported by 100 men and women, cured and satisfied patients and nearly 1000 dried and preserved cancers, as living and ready evidence that the CURES WERE PERFECTED.

But the Judge, of this COURT OF LAW, but allegedly NOT A COURT OF JUSTICE, denied the defense attorney a right TO ALLOW A SINGLE WITNESS or OFFER as Evidence a Single one of the extracted cancers as proof of the prowess of this good and true, but wilfully persecuted citizen's proven claims for his cancer CURE.

It is almost incomprehensible to imagine such a ruling by Any Court, but we are informed by one WHO WAS THERE that this ruling was made.

It is JUST ANOTHER DR. JOHN R. BRINK-LEY CASE, but on a much smaller scale.

Mr. Cooper did so much of this work for poor folks who were unable to pay that he is without funds and needs \$100 to perfect an appeal to a Court of Justice.

The time is limited—do your "bit" NOW. Send 1.00, \$5.00 or \$10.00 at once to Dr. Perdue. as per address above, or to Publicity, 620 West Douglas, Wichita.

Friends, don't let this old man be "railroaded"

to the pen just to gratify the merciless desire of a jealous bunch or marauding medical men who persist that cancer cannot be cured.

* * *

The injunction granted by Judge Cooper (no relation to W. W. Cooper) is as follows:

IN THE DISTRICT COURT OF WILSON COUNTY, KANSAS.

No. 12711

THE STATE OF KANSAS, ex rel, Plaintiff,

W. W. COOPER, Defendant.

JOURNAL ENTRY.

BE IT REMEMBERED, That on this 20th day of September, 1937, the same being a regular judicial day of the above entitled Court, this matter comes on for trial in its regular assignment, the Plaintiff appearing by Clarence V. Beck, Attorney General, and Theo. F. Varner, Assistant Attorney General, and the Defendant appearing in person and by his attorneys, E. M. Perdue and J. L. Stryker.

Upon the motion of the plaintiff, E. M. Perdue, Attorney for the defendant, showed authority to appear as an Attorney at Law in this case.

The defendant's motions to dismiss and motion to quash heretofore filed in this matter, were then heard by the Court, and such motions were overruled.

Thereupon, attorneys for plaintiff announced themselves ready for trial and the defendant orally moved the submission of this cause to a jury, which said motion was by the Court overruled.

Thereupon the plaintiff introduces its evidence and rests, and the defendant introduces its evidence and rests, and after hearing said evidence, arguments of counsel, and being fully advised in the premises, this Court finds in general that the allegations of the Petition filed herein are true and correct, and specifically finds that the defendant, W. W. Cooper, is not now, nor has he ever been licensed by the Board of Medical Registration and Examination of the State of Kansas.

This Court further finds that the defendant has been engaged in the unlawful practice of medicine and surgery as defined by the laws of the State of Kansas, at and within the City of Altoona, Wilson County, Kansas.

The Court further finds that this defendant should be ousted from the unlawful practice of medicine and surgery, and permanently enjoined against the further unlawful practice of medicine and surgery.

IT IS THEREFORE BY THE COURT OR-DERED, ADJUDGED AND DECREED, That the Defendant, W. W. Cooper be, and he hereby is ousted from the unlawful practice of medicine and surgery.

IT IS BY THE COURT FURTHER OR-DERED, ADJUDGED AND DECREED, That the Defendant, W. W. Cooper be, and he hereby is permanently enjoined and restrained from the unlawful practice of medicine and surgery as defined by the laws of the State of Kansas. IT IS FURTHER BY THE COURT OR-DERED, ADJUDGED AND DECREED, That all persons acting by, through and under the Defendant, W. W. Cooper, be, and they hereby are permanently enjoined and restrained from so acting in the unlawful practice of medicine and surgery.

IT IS BY THE COURT FURTHER OR-DERED, ADJUDGED AND DECREED. That the Defendant be, and he hereby is permanently enjoined and restrained from erecting and maintaining on his premises in Altoona, Kansas, any and all signs pertaining to the cure of cancer or other practice of medicine and surgery, and the Defendant be, and he hereby is permanently enjoined and restrained from using the premises in the City of Altoona, Kansas, as a clinic for the cure and treatment of individuals afflicted with cancer or any other ailment.

IT IS FURTHER BY THE COURT OR-DERED, ADJUDGED AND DECREED, That the costs of this action be taxed against the Defendant.

J. T. Cooper, Judge.

Submitted by:

Clarence V. Beck, Attorney General. Theo. F. Varner, Assistant Attorney General.

Approved by:

E. M. Perdue,

J. L. Stryker, Attorneys for Defendant.

NEW APPOINTEE

Governor Walter Huxman announced on October 4 the appointment of Dr. J. A. Wheeler, Newton, as a member of the Board of Medical Examination and Registration.

Dr. Wheeler's appointment fills the vacancy created by the death of Dr. W. C. Burnaman, Washington. His term will expire April 30, 1938.

VISITOR

Dr. Morris Fishbein, Editor of the Journal of the American Medical Association, was guest speaker at a dinner meeting of the Topeka Knife and Fork Club held in Topeka on September 20. His subject was "Medicine and the Changing Social Order", which was well received by a large audience.

Dr. Fishbein was a guest of Dr. Karl Menninger during his stay in Topeka and also was honored by a bridge party at the home of Dr. W. M. Mills.

STATE BOARD OF HEALTH

A meeting of the Kansas State Board of Health was held in Topeka on September 16. Principle order of business was the consideration of the regular reports of the various divisions of the Board. Members in attendance were: Dr. Geo. I. Thacher, Waterville, President; Dr. H. L. Aldrich, Caney; Dr. W. C. Lathrop, Norton; Dr. J. L. Lattimore, Topeka; Dr. R. T. Nichols, Hiawatha; Dr. Alfred O'Donnell, Ellsworth; Dr. Albert Rettenmaier, Kansas City; Dr. J. W. Spearing, Cimarron; and Mr. A. B. Mitchell, Lawrence.



LIVE LONGER TODAY

THE LIFE SPAN of the diabetic has been lengthened considerably following the discovery of Insulin and the growing knowledge of its use. There is, however, a definite responsibility on the part of the physician to educate the many new diabetics in the importance of proper diet and proper use of Insulin preparations.

The apparent increase in diabetes in recent years has been attributed to the modern manner of living, increased sugar consumption, overeating and lack of muscular exercise. With proper management the great majority of patients can be kept well-nourished, sugar-free, and at work.

Insulin Squibb is an aqueous solution of the active anti-diabetic principle obtained from pancreas. It is accurately assayed, uniformly potent, carefully purified, highly stable and remarkably free of pigmentary impurities and proteinous reaction-producing substances.

Insulin Squibb of the usual strengths is supplied in 5-cc. and 10-cc. vials.

Protamine Zinc Insulin, Squibb complies with the rigid specifications of the Insulin Committee, University of Toronto, under whose control it is manufactured and supplied. It is available in 10-cc. vials. When this preparation is brought into uniform suspension, each cc. contains 40 units of Insulin together with protamine and approximately 0.08 mg. of zinc.

E-R-SQUIBB & SONS, NEW YORK

MANUFACTURING CHEMISTS TO THE MEDICAL PROFESSION SINCE 1858.

OKLAHOMA CITY CLINICAL CONFERENCE

The Eighth Annual Fall Clinical Conference of the Oklahoma City Clinical Society will be held November 1 to 4, at the Biltmore Hotel in Oklahoma City. This post-graduate medical assembly again offers the profession of the Southwest another series of intensive clinics and lectures covering the most important fields of medicine, surgery, and the specialties. The sixteen guest lectures this year are among the recognized leaders in their respective fields and have chosen very practical subjects. In addition to the distinguished guests, the program includes seventy-two lecturers selected from local members of the society, all of whom have teaching ability and practical experience in their particular subjects.

Guest speakers will be as follows: Dr. John W. Amesse, Denver, Colorado; Dr. William L. Benedict, Rochester, Minnesota; Dr. William Boyd, Winnipeg, Manitoba; Dr. C. E. Burford, St. Louis, Missouri; Dr. Frederick Christopher, Evanston, Illinois; Dr. H. Earle Conwell, Birmingham, Alabama; Dr. Walter Dannreuther, New York City; Dr. Claude F. Dixon, Rochester, Minnesota; Dr. Chevalier L. Jackson, Philadelphia, Pennsylvania; Dr. Samuel A. Levine, Boston, Massachusetts; Dr. E. Perry McCullagh, Cleveland, Ohio; Dr. Norman F. Miller, Ann Arbor, Michigan; Dr. Bernard H. Nichols, Cleveland, Ohio; Dr. Cyrus Sturgis, Ann Arbor, Michigan; Dr. J. H. J. Upham. Columbus, Ohio; and Dr. Fred W. Weidman, Philadelphia, Pennsylvania.

Other information concerning the meeting will be found on page III of this issue of The Journal.

RESPIRATORS

An example of the resourcefulness of the medical profession in time of need is displayed in the following account of respirators in the state. Last month after a complete survey, it was found that only one respirator was available in Kansas—at the Stormont Hospital in Topeka. Since that time arrangements have been made or are being made for purchase of respirator equipment at Hutchinson, McPherson, Kansas City, Medicine Lodge, and several other places.

EXHIBIT

The Journal was an exhibitor, upon invitation, at the Fall Conference of the Kansas City Southwest Clinical Society held in Kansas City, Missouri, from October 4 to 7.

The exhibit, which was also shown at the last annual session of the Society, included The Journal from Volume I, No. 1 through the September, 1937 issue, journals of other state medical societies, American Medical Association publications, and several other interesting medical periodicals.

COMMITTEE MEETINGS

The following is the minutes of the meetings of the Committee on Control of Tuberculosis and the Committee on Conservation of Eyesight, held upon September 6 and September 12 respectively:

A meeting of the Committee on Control of Tuberculosis was held at the Hotel Jayhawk in Topeka, on Monday, September 6. 1937.

Dr. Henry N. Tihen, Wichita, Chairman, presided. Committee members present were: Dr. E. K. Musson, Topeka; Dr. C. H. Lerrigo, Topeka; Dr. J. G. Hughbanks, Independence; Dr. R. L. Gench, Fort Scott; Dr. N. C. Nash, Wichita; and Dr. C. F. Taylor, Norton. Other members present were: Dr. F. P. Helm, Topeka; Dr. F. A. Trump, Ottawa; Dr. C. E. Coburn, Kansas City; and Dr. F. L. Loveland, Topeka, Mr. Theo. Varner, Assistant to the Attorney General, Topeka, and Clarence G. Munns, Topeka, were also present.

Dr. Tihen discussed the need and desirability for this committee, composed of representatives of the four major tuberculosis agencies in the state (the Kansas State Board of Health, the Kansas Tuberculosis and Health Association, the State Sanatorium for Tuberculosis. Norton, and The Kansas Medical Society) to coordinate tuberculosis programs in Kansas. He also reviewed the work of this committee during last year. It was agreed that coordination of Kansas tuberculosis activity offered many advantages and that the plan of cooperation through this committee should be continued.

First order of business was discussion as to whether this committee should recommend a series of councilor district clinics, sponsored in close cooperation with family physicians, to aid in the discovery and treatment of tuberculosis. Agreement was that this possibility should be tabled for further consideration.

Tuberculin testing by the Kansas State Board of Health was discussed and a recommendation was made to the Board of Health that it submit at the next meeting a written procedure of the methods it desires to follow in this connection. This in turn to be approved by the committee and forwarded to the county medical societies for their information.

The possibility of a tuberculosis post-graduate course similar to those which have been sponsored by the Committee on Control of Cancer was discussed. Dr. Lerrigo and Dr. Helm were asked to submit a report at the next meeting as to whether the Kansas Tuberculosis and Health Association and the Kansas State Board of Health would be interested in financing a program of this kind.

Dr. Taylor was asked to submit a report at the next meeting as to whether the State Sanatorium at Norton could arrange to provide tuberculosis postgraduate instruction at the Sanatorium.

Consideration was given to sanatorium facilities in the state for treatment of tuberculosis and a decision was made that this committee should, if desired, aid the legislature in preparing plans for the location and kind of any additional facilities to be provided. Dr. Lerrigo, Dr. Taylor, Dr. Gench and Dr. Hughbanks were asked to present a report at the next meeting concerning present facilities and needed facilities.

It was moved by Dr. Lerrigo, seconded by Dr. Nash, and approved unanimously, that the committee should prepare a letter to Governor Walter Huxman, the State Board of Administration, and the Legislature expressing commendation for their improvements in facilities at Norton.

It was agreed that a bulletin should be issued to the county medical societies explaining the plans of this committee and urging their assistance in the handling of a coordinated tuberculosis program for Kansas.

A recommendation was approved that this committee shall cooperate in any way possible desired by the Editorial Board in providing a bi-monthly section on tuberculosis in The Journal, which would consist mainly of original Kansas scientific material.

Dr. Tihen appointed Dr. Gench as a committee of one to compile information concerning the number of

As A Matter of Information-

R

One pair Soft-Lite lenses assembled in Shuron HiBo

frame.

Question:

What wholesaler can fill this prescription completely?

Answer:

Quinton-Duffens—they are the only wholesalers in the

territory licensed for both products.

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Your Local Independent Wholesaler

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HUTCHINSON

SALINA

JAMES Y. SIMPSON, M.D. Neurologist and Addictologist HERMAN S. MAJOR, M.D. Neuro-Psychiatrist

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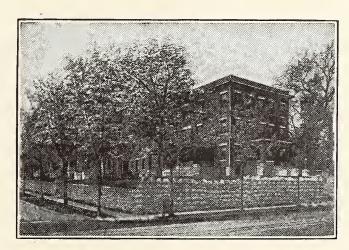
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Beautifully situated in a pleasant residence section of the city. Fully equipped and well heated. All pleasant outside rooms. Large lawn and open and closed porches for exercise. Experienced and humane attendants. Liberal, nourishing diet. Resident physician in attendance day and night.



Hofel Jayhawk

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pneumo-thorax machines and operators in the state. Dr. Gench was also asked to present a report concerning an inexpensive pneumo-thorax machine described by Dr. Taylor.

Dr. Tihon appointed Dr. Nash as a committee of one to make a survey of the number and kind of x-ray machines in the state.

Consideration was given to interpretation of x-ray films in tuberculosis diagnosis and it was agreed that a consultation service for this purpose should be discussed at a later meeting.

Dr. Taylor was asked to submit at the next meeting a recommendation for procedure which could be suggested to the county medical societies for locating tuberculosis through contacts of known patients.

Upon unanimous agreement of the committee, it was decided that the next meeting should be held at the Hotel Jayhawk in Topeka, on Sunday, October 17, at 2 p.m. Adjournment followed.

* * *

A meeting of the Committee on Conservation of Eyesight was held at the Hotel Eldridge in Lawrence, on Sunday, September 18, 1937, commencing at 10:00 a.m.

Dr. Lyle S. Powell, Chairman, Lawrence, presided. Members of the committee present were: Dr. Wm. Scales, Hutchinson, and Dr. Geo. Gsell, Wichita. Others present were: Dr. C. J. Mullen, State Ophthalmologist for the Kansas Social Welfare Board, Kansas City; Dr. Lewis H. Carris, Managing Director of the National Society for the Prevention of Blindness, New York City; Mr. L. Q. Lewis, Executive Secretary of the Kansas Society for the Prevention of Blindness, Wichita; and Clarence G. Munns, Topeka.

Dr. Carris reviewed extensively the work of the National Society for the Prevention of Blindness and described blind prevention programs in several other states. The committee discussed many questions with him concerning possibilities for an efficient blind prevention program in Kansas.

Discussion followed concerning sight-saving classes. Mr. Lewis described the present program in this direction at Wichita. It was generally felt by the committee that the Society should assist in the furtherance of work of this kind in Kansas. Dr. Carris discussed a possibility that the National Society for the Prevention of Blindness might be able to assist in providing and training teachers for sight-saving classes. It was agreed that this committee should work in any way desired by the Kansas Society for Prevention of Blindness toward accomplishment of a program of this kind.

Decision was made that this committee should invite Mr. Lewis as representative for the Kansas Society for the Prevention of Blindness and for the Kansas Association for the Blind and Dr. Mullen as State Ophthalmologist for the Kansas Social Welfare Board, to attend all of its meetings.

Discussion was given as to the advisability of organizing a state committee on the prevention of blindness which would embrace representatives from all interested organizations. It was agreed that arrangements of this kind should be postponed until further plans have been developed by the Kansas Society for the Prevention of Blindness and by this committee.

A recommendation was approved that the committee should attempt to secure permission from the Board of Administration to make an inspection of the Kansas School for the Blind at Kansas City.

The present Kansas silver nitrate law was discussed

and instruction was given to the central office that it should forward a copy of the law and the recommendations of the Kansas State Board of Health thereon to each member of the committee for study and discussion at the next meeting.

The central office was also asked to obtain a packet of scientific literature on the subject of prophylaxis for ophthalmia neonatorium and to forward same to the members of the committee for their study and consideration.

The central office was requested to secure from the Kansas State Board of Health, statistics during the past five years showing the number of births attended by doctors of medicine, osteopaths and midwives in order that further study might be made of ophthalmia neonatorium.

Dr. Mullen advised the committee that he would be able to provide considerable information concerning blindness in Kansas from his blind assistance records and the committee requested that he provide anything which he deemed to be of value.

Decision was made that the committee should issue a bulletin to the county medical societies advising them of the plans of this committee and requesting their assistance therein.

Recommendation was made that a letter should be directed to the Editorial Board of The Journal suggesting that the recent Reader's Digest article "Optometry on Trial" be published in The Journal.

Considerable discussion was given to ways and means for lay educational activities in the field of conservation of eyesight and agreement was made that this should be discussed at the next meeting.

Adjournment followed.

Other committee meetings held recently are: The Committee on Public Policy in Kansas City, Missouri, on October 5; the Committee on Auxiliary in Kansas City, Missouri, on October 5; and the Committee on Medical Schools in Kansas City, Missouri, on October 6. Another meeting of the Committee on Control of Tuberculosis will be held in Topeka on October 17. Minutes of these meetings will be published in the next issue of The Journal.

CANCER PROGRAM

Marshall County Medical Society is making plans toprovide a-lay educational program on the subject of can₇ cer.

Present plans are that the members of the society will provide a series of cancer symposiums consisting of four or five speakers for each symposium before a number of women's clubs and other lay groups in the county.

The program has been approved by the Society Committee on Control of Cancer and by the Kansas Women's Field Army for the Control of Cancer.

STATE MEETING DATE CHANGED

Due to a confusion in reservations between the management of the Wichita Chamber of Commerce and the management of the Wichita Forum, the Sedgwick County Medical Society found it necessary to recommend to the



Oleum Percomorphum Price Substantially Reduced Sept. 1, 1936!

We are hopeful that by the medical profession's continued whole-hearted acceptance of Oleum Perco-morphum, liquid and capsules (also Mead's Cod

Liver Oil Fortified With Percomorph Liver Oil), it will be possible for us to make the patient's "vitamin nickel" (A and D) stretch still further. Mead Johnson & Company, Evansville, Indiana, U. S. A., does not advertise any of its products to the public.

Council that the date for the next annual session should be changed from May 2, 3, 4, 5, to May 9, 10, 11, 12.

At the time the former date was established by the Council, the Wichita Chamber of Commerce had advised that it would be able to provide reservations for that week. However, later developments showed that another organization had reserved the Wichita Forum for the same time and since this group was unwilling to relinquish its reservation, no choice existed except for the Society to select another date.

The change was approved by the Council and thus the Wichita Annual Session will be held on May 9, 10, 11 and 12, 1938.

SECRETARIES CONFERENCE

The Annual Conference of Secretaries of Constituent State Medical Associations will be held at the American Medical Association headquarters in Chicago on November 19 and 20. The program will consist of papers and discussions pertaining to medical organization and medical publications.

Representatives from Kansas who will attend are as follows: Dr. J. F. Gsell, Wichita; Dr. W. M. Mills, Topeka; Dr. L. R. Pyle, Topeka; Dr. R. B. Stewart, Topeka; Dr. H. L. Chambers, Lawrence; and Clarence Munns, Topeka.

MEMBERS

Dr. F. H. Buckmaster, formerly of Dodge City, has opened an office in Elkhart.

Dr. Lerton V. Dawson, Ottawa, has recently been appointed by the Board of Administration as surgeon of the State School for the Deaf at Olathe.

Dr. Ralph Fellows, Superintendent of the State Hospital at Osawatomie, was injured in an automobile accident in Topeka on September 14. Dr. Fellows suffered a broken collar bone and bruises, but is recovering satisfactorily.

Dr. Rene M. Gouldner, Wichita, has recently returned from a six week's tour of Europe.

Dr. O. J. Hartig, Downs, has been awarded a one year Commonwealth Fellowship in surgery at the Tulane University School of Medicine, New Orleans. Dr. Hartig left Downs early in September to commence study.

Dr. L. D. Johnson, Chanute, attended the International Congress of Radiology held in Chicago in September.

Dr. Karl A. Menninger addressed the Indiana State Medical Association at French Lick, Indiana, October 6, on "The Psychoneurotic and the General Practitioner".

Dr. William C. Menninger gave the Rogers Memorial lecture at the 96th Annual Meeting of the Wisconsin Medical Society on September 17 in Milwaukee. His subject was "Psychological Factors in Medical and Surgical Conditions". He also presented a paper before that society on September 16 on "Individualization of Psychiatric Hospital Treatment".

Dr. Clyde C. Merideth, who has practiced in Elkhart for the past five years, has moved to Emporia, where he has opened offices in the Gazette Building. Newly appointed county health officers are: Dr. F. H. Buckmaster, Elkhart, Morton County; and Dr. Vance Morgan, Liberal, Seward County.

The following members have recently moved into new offices: Dr. J. E. Attwood, LaCrosse; Dr. A. C. Baird, Parsons; Dr. C. E. Brunner, Wamego; Dr. E. A. Marrs, Sedan; Dr. Vance Morgan, Liberal; Dr. C. C. Price, Little River; and Dr. Fred E. Rogers, Linn. Construction has also been started on a seventeen room hospital for Dr. L. C. Hays of Cedar Vale.

Members who presented papers at the Fall Conference of the Kansas City Southwest Clinical Society, held in Kansas City, Missouri, from October 4 to 7, were as follows: Dr. C. J. Mullen-"Treatment and Care of Industrial Eye Injuries"; Dr. O. W. Davidson-"Diagnosis of Abdominal Pain from the Urological Viewpoint"; Dr. Thomas J. Sims, Jr.—"Indications and Contra-Indications for Caeserean Section"; Dr. Harold V. Holter—"Diagnosis and Treatment of Vaginal Discharge"; Dr. Lewis G. Allen-"Radiation Therapy in Nonmalignant Lesions of the Female Pelvis"; Dr. Ralph H. Major-"The Use of Protamine Zinc Insulin in Diabetes"; and Dr. Thomas G. Orr-"Importance of Water Balance in the Sick Patient". Kansas was represented in the scientific exhibit section of the same meeting by the following: Dr. Fred E. Angle-"Undulant Fever"; Dr. O. W. Davidson-"Tidal Drainage Apparatus (Munro) and Viscero-Renal Pathways"; Dr. Galen Tice-"Radiation Treatment of Superficially Located Malignancies, Bone Metastases and Certain Bone Tumors"; and Dr. Maurice A. Walker-"Water Bal-

COUNTY SOCIETIES

The regular meeting of the Clay County Medical Society was held in Clay Center on September 16. Dr. Fred McEwen of Wichita spoke on "Myocardial Failure". Visitors present were Dr. Robert Carr, Junction City, and Dr. Sievert Anderson, Morganville.

Dr. Fred E. Angle, Kansas City, was speaker at the first fall dinner meeting of the Cowley County Medical Society held September 9 in Winfield. His subject was "Impressions of European Conditions and Medicine", which he gained on a recent trip to those countries. About thirty members were in attendance and guests were Winfield dentists.

Members of the Harvey County Medical Society held a dinner meeting in Newton on September 6. Scientific papers were presented by Dr. Arnold G. Isaac, and Dr. A. S. Hawkey, of Newton.

Dr. J. M. Sutton, Lincoln, and Dr. W. G. Emery, Barnard, were elected president and secretary, respectively, of the Lincoln County Medical Society, at a meeting held in Lincoln on September 10.

The Linn County Medical Society met in Mound City on September 14. Mr. Clarence Schooley of the county welfare office discussed social security problems.

Marion County Medical Society had as speakers at a meeting on September 26, Dr. E. Allen Pickens and Dr. E. E. Tippen, whose subjects were "Diseases of the Prostate" and "Why You Blow Your Nose," respectively. A dinner preceded the meeting. The Marion County

CANNED FOODS IN THE CONTROL OF LATENT AVITAMINOSES

• In June, 1935, this space was devoted to a discussion of some of the general aspects of latent avitaminoses. It appears pertinent to report some of the more recent ideas in regard to this important field.

Considering the subject of avitaminoses in its entirety, the modern medical attitude is aptly expressed by the following statement:
"... the mild or latent forms of the vitamin deficiencies are more important in practice at present than the fully developed cases. The latter are uncommon, are easily recognized and are usually promptly and adequately treated. On the other hand there is reason to believe that minimal or mild forms of these diseases are much more frequent, often escape recognition and, because of their insidious effect on large numbers of people, constitute a more serious problem than the occasional advanced cases." (1)

Consideration of this statement brings home the importance of optimum vitamin intake. Students of nutrition agree that in order to achieve this objective, a liberal and varied diet must be available. The constituents of the diet should be wholesome foods, the preparation of which has not materially reduced their intrinsic nutritive values. Commercially canned foods fall well within this classification.

Modern canning procedures are designed to protect the vitamin potencies of the food. Recent reports in the scientific literature indicate the success attained in retaining vitamin values in commercially canned foods. (2)

In general, the control of latent avitaminoses and the advancement of positive health appear to be largely matters of practical application of facts made available by the modern science of nutrition. We wish to direct attention to the part which the wide variety of canned foods available on the American market may play in establishing dietary regimes calculated to control the avitaminoses.

AMERICAN CAN COMPANY

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(1) 1937. J. Am. Med. Assn. 108, 15.
 (2) 1936. J. Nutr. 12, 405.

(2) 1936. J. Am. Diet. Assn. 12, 231. 1936. J. Nutri. 11, 383. 1936. Ind. Eng. Chem. 28, 1009. (2) 1935. J. Home Econ. 27, 658. 1935. U. S. Pub. Health Rpts. 50, 1333. 1935. Am. J. Pub. Health 25, 1340.

This is the twenty-ninth in a series of monthly articles, which will summarize, for your convenience, the conclusions about canned foods which authorities in nutritional research have reached. We want to make this series valuable to you, and so we ask your help. Will you tell us on a post card addressed to the American Can Company, New York, N. Y., what phases of canned foods knowledge are of greatest interest to you? Your suggestions will determine the subject matter of future articles.



The Seal of Acceptance denotes that the statements in this advertisement are acceptable to the Council on Foods of the American Medical Association. Society also sponsored a 4-H Club exhibit at the Marion County Fair held October 5 to 8 at Hillsboro.

Sixteen members of the Montgomery County Medical Society, and their families, attended an annual picnic on September 19 at the Cherryvale Country Club. The afternoon was devoted to golf and trap-shooting.

Members of the Riley County Medical Society assisted the student health service of Kansas State College, Manhattan, in conducting freshman physical examinations.

The Rush-Ness County Medical Society met for a business session and luncheon in Alexander on September 15.

Committee chairmen of Sedgwick County Medical Society met in Wichita on September 8 with the following advisory group of physicians representing surrounding counties to discuss plans for the 1938 Annual Session: Dr. R. G. Klein, Dodge City; Dr. K. A. Fischer, Arkansas City; Dr. Å. R. Hatcher, Wellington; Dr. Robert Sohlberg, McPherson; Dr. G. G. Whitley, Douglass; and Dr. H. R. Schmidt, Newton.

Shawnee County Medical Society held a business meeting in Topeka on October 4. An immunization plan submitted by a committee for the city of Topeka was discussed and approved. The society also approved arrangements for an executive council which will meet weekly to facilitate the handling of business affairs.

Dr. J. W. Shaw, Wichita, spoke at a meeting of the Sumner County Medical Society held in Wellington on September 16.

About forty physicians attended a meeting of the Southeast Kansas Medical Society held in Coffeyville on September 15. Speakers and their subjects were: Senator Payne Ratner, Parsons, "What Price Liberty"; Dr. Robert M. Isenberger, Associate Professor of Pharmacology, University of Kansas School of Medicine, "Modern Drug Therapy"; and Dr. John C. Farris, Instructor of Pharmacology, University of Kansas School of Medicine, "Pathological Results of Drug Intoxications".

The first fall meeting of the Wilson County Medical Society was held in Fredonia on September 13, for the discussion of plans for the coming year. Members of Wilson County Society, in cooperation with the Wilson County Board of Commissioners have recently conducted diphtheria immunizations for children of the county. Free toxoid was furnished by the Kansas State Board of Health.

ANNOUNCEMENTS

To assist in bringing before the public the effort being made to eradicate syphilis, The United States Public Health Service has prepared a set of six educational posters. It is believed these posters will be of assistance to physicians who wish to take part in this activity. These posters, if desired, may be obtained from the Superintendent of Documents, Washington, D. C., at seventy-five cents per set.

The American Board of Pediatrics will hold fall examinations as follows: On Sunday, October 17, at Chicago, after the meeting of Region III of the American Academy

of Pediatrics; on Sunday, November 7, at Los Angeles, after the meeting of Region IV of the American Academy of Pediatrics; on Sunday, November 14, at Boston, after the meeting of Region I of the American Academy of Pediatrics, and on Tuesday, November 30, at New Orleans, before the joint meeting of Region II of the American Academy of Pediatrics and the Southern Medical Association.

The Fifteenth Annual Meeting of the Academy of Physical Medicine will be held at the Hotel Walton, Philadelphia, October 19, 20, 21, 1937. A copy of the program may be had by addressing William D. McFee, M.D., Chairman, Committee on Program and Publication, 41 Bay State Road, Boston, Mass.

The next examinations of the American Board of Obstetrics and Gynecology (written and review of case histories) for Group B candidates will be held in various cities of the United States and Canada on Saturday, November 6, 1937, and Saturday, February 5, 1938. Application for admission to these examinations must be filed on an official application form in the office of the Secretary at least sixty days prior to these dates.

The general oral, clinical and pathological examinations for all candidates (Groups A and B) will be conducted by the entire Board, meeting in San Francisco, California, on June 13, and 14, 1938, immediately prior to the meeting of the American Medical Association.

Application for admission to Group A examinations must be on file in the Secretary's Office before April 1, 1938.

For further information and application blanks address Dr. Paul Titus, Secretary, 1015 Highland Building, Pittsburgh, (6), Pa.

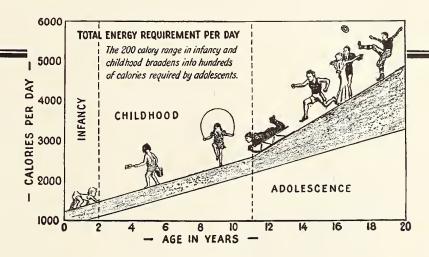
The first West Coast meeting of the American Academy of Orthopaedic Surgeons will be held on January 16-20, 1938, at the Hotel Biltmore, Los Angeles. Special trains will be run with stop-overs at Santa Fe, the Grand Canyon, San Francisco and other points. For further information write to Robert L. Lewin, Hotel Biltmore, Los Angeles, California.

The Pacific Fleet will be in the port of Los Angeles during the Convention of the Association of Military Surgeons on October 14-16, 1937, at the Ambassador Hotel. An unusually interesting program has been prepared and the Scientific and Technical Exhibits will be the largest in the history of the organization. Physicians, Surgeons, Dentists and Veterinarians of the Army, Navy, Marine Corps, C.C.C. Camps and the Veterans Administration will be present. For additional information write to Robert L. Lewin, Ambassador Hotel, Los Angeles, California.

NEW BOOKS RECEIVED

SYNOPSIS OF GENITOURINARY DISEASES—By Austin I. Dodson, M.D., Professor of Genitourinary Surgery, Medical College of Virginia. Second Edition, published by The C. V. Mosby Company, St. Louis, at \$3.00 per copy. Octavo 294 pages with 112 illustrations. The author in the preface states that the purpose of this book is to present a synopsis of genitourinary diseases so that the essential facts connected with urology may be readily grasped by the student of medicine and serve as a handy reference for the practicing physician.

Careful study shows many young folks do not consume enough food to provide them with the enormous energy requirements necessary during the transitional period of adolescence. The symptoms are the consequence of undernutrition.



Normal adolescent boys and girls frequently complain of fatigue. They feel weak and irritable; they show a diminished ability to concentrate; they are disinclined to work; they are physically inefficient.

Some of these symptoms are physiological manifestations of adolescent development.

The graph reveals the sudden rise in caloric requirement during adolescence. Three hurried meals are usually insufficient to provide the tremendous caloric needs. Accessory meals, mid-morning and mid-afternoon, in certain instances, may be prescribed with advantage.

And Karo added to foods and fluids can increase calories as needed. A tablespoon of Karo yields 60 calories. It consists of palatable dextrins, maltose and dextrose (with a small percentage of sucrose added for flavor).

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The second edition includes some recent advances in the treatment of these diseases, particularly regulation of diet. A discussion of neurogenic and functional disturbances of the bladder has been added and also functional disturbances of the male sexual system.

THE HUMAN MIND-By Karl A. Menninger, M.D., The Menninger Clinic and Sanitarium, Topeka, Kansas. Second Edition, corrected, enlarged and rewritten, redesigned and entirely reset and printed from new plates. Published by Alfred A. Knopf, New York. at \$5.00 per copy. The author in the preface states that the question of the relative importance of heredity and environment in personality formation has been discussed at some length—the section of treatment has been made more specific-the section on psychoanalysis has been rewritten to include the advance of the past seven years in a more systematic and comprehensive account a brief section on religious applications of psychiatry has been inserted-and to assist doctors, medical students, and young psychiatrists, the references to sources and more technical discussions have been greatly expanded and the bibliography has been reclassified. Includes new material on: Mental Hygiene, Treatment of Neurosis, Inheritance of Insanity, "Mass Paranoia", Intelligence Tests, Suicide Mania, Melancholia, Schizophrenia, Brain Syphilis, Imbecility, etc.

THE HUMAN BODY—By Logan Clendening, M. D., Kansas City, Missouri. Third Edition, corrected, enlarged and rewritten, redesigned and entirely reset and printed from new plates. Published by Alfred A. Knopf, New York, at \$3.75 per copy. According to the publishers it incorporates the recent discoveries and practices in medicine and physiology, including new material on: The Heart, The Blood, Morbid Inheritance, Twins, Vitamins, Nutrition, Sex, Kidney Diseases, Endocrine Glands, Diphtheria, Typhoid, Venereal Disease, Span of Life, etc.

INTERNATIONAL CLINICS, Vol. III, September, 1937, Forty-Seventh Series—Edited by Louis Hamman, M.D., Visiting Physician, Johns Hopkins Hospital, Baltimore, Maryland. Published by J. B. Lippincott Company. Medical Clinics at the Johns Hopkins Hospital. Includes Sections on: Infectious Diseases, Diseases of the Lungs, Diseases of the Heart and Circulation, Diseases of Endocrine Glands, Diseases of Metabolism, and Diseases of Joints.

CLINICAL URINALYSIS—By Robert A. Kilduffe, M.D., Director of Laboratories, Atlantic City Hospital. Octavo 428 pages with 40 illustrations. Published by F. A. Davis Company at \$4.00 per copy.

The author in the preface gives the purpose of this book as an attempt to present in a relatively concise form the subject of urinalysis from the standpoint of the physician with particular reference to procedures feasible in the office laboratory.

INJECTION TREATMENT OF HERNIA—By Carl O. Rice, M. D., Instructor in Surgery, University of Minnesota School of Medicine. Octavo 266 pages with 85 illustrations. Published by the F. A. Davis Company at \$4.50 per copy.

The contents include chapters as follows: Historical; The Anatomy Of The Abdominal Wall In Relation To The Various Types Of Hernia; The Etiology Of Hernia; Diagnosis And Differential Feature Of Hernia; The Truss; Treatment Of Hernia By The Injection

Method; Complications And Sequelae; Results Associated With The Injection Treatment Of Hernia; Histopathology Of The Injection Treatment Of Hernia; and Medico-Legal Aspects Of Hernia.

PSYCHIATRIC NURSING—By William S. Sadler, M.D., Chief Psychiatrist and Director, The Chicago Institute of Research and Diagnosis; in collaboration with Lena K. Sadler, M.D., Associate Director, The Chicago Institute of Research and Diagnosis; and Anna B. Kellogg, R.N., Chief of Nurses, The Psychiatric Clinic of the Chicago Institute of Research and Diagnosis. Published by The C. V. Mosby Company at \$2.75 per copy. Octavo 433 pages with nineteen illustrations.

The author in the preface states that this textbook has been written to meet the requirements of the recently enlarged courses in psychiatric nursing which have been adopted by most of the American schools of nursing. Part I covers the approach to mental hygiene, Part II discusses human personality, Part III the nursing of the psychoses, and Part IV presents psychotherapeutics.

MORBIDITY REPORT

New communicable disease cases in the state as compared with last month are reported by the Kansas State Board of Health as follows:

Disease	Month Ending August 28	Month Ending October 4
Scarlet fever		216
Poliomyelitis	61	126
Typhoid fever		43
Measles	33	24
Diphtheria	9	22
Meningitis	5	2
Whooping cough	331	285
Syphilis	176	189
Mumps	87	1 2 5
Gonorrhea	74	92
Pneumonia	41	80
Tuberculosis	108	64
Chickenpox	11	17
Malaria	4	9
Vincent's angina		20
Undulant fever		9
German measles	12	7
Cancer		5
Encephalitis		9
Erysipelas	2	3
Bacillary dysentery	3	2
Impetigo		2
Smallpox		2 2 2
Septic sore throat		2
Tetanus		1
Strychnine poisoning		1
Diarrhea and enteritis		1
Dysentery		1
Influenza		0
Amoebic dysentery	2	0

BOARD OF HEALTH NOTES

The State Board of Health had a booth at the Kansas State Fair at Hutchinson, the week of September 20. This was the first time an exhibit had been at the Hutchinson Fair, and due to limited space only three divisions were represented, including the Child Hygiene, Sanitation and Dental divisions.

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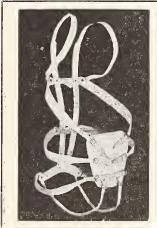
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Our ALCOHOLIC treatment destroys the Craving, restores the appetite and sleep, and rebuilds the physical and nervous condition of the patient. Whiskey withdrawn gradually; no limit on the amount necessary to prevent or relieve delirium.

MENTAL patients have every comfort that their home affords.

Select cases of SENILITY accepted.

The DRUG treatment is one of Gradual Reduction; it relieves the constipation, restores the appetite and sleep; withdrawal pains are absent. No Hyoscine or rapid withdrawal methods used unless patient desires same.

NERVOUS patients are accepted by us for observation and diagnosis, as well as treatment. Physiotherapy—Clinical Laboratory—X-Ray.

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fect condition—The model: "H. G. Fisher & Co., Chicago. No. 32581. Cycle 60. Volt 110/220. Type X. Amp. 35/20. Has fleuroscope. Good model for office or hospital use. Good as new. Property of the late Dr. James M. Scott of Lebanon, Kansas. Write to Mr. J. R. White, Mankato, Kansas.

AUXILIARY

Edited by Mrs. W. G. Emery, Press Publicity Chairman

PRESIDENT'S MESSAGE

Dear Auxiliary Members:

By this time most all of you have attended one auxiliary meeting. Seems good to get together again doesn't it? After all, as time goes on, we regret the fact that we were not organized years ago.

Since this is what one might call the beginning of a new year, I would like for each county president to make a "please remember" list.

First, keep your attendance records. (The number attending each meeting so that a percentage of attendance may be figured at the end of the fiscal year.)

If any deaths occur in your auxiliary please send name and date of death to me.

We must use the space given us in The Journal of The Kansas Medical Society. All publicity chairmen please send two notices of each meeting, one to Mrs. W. G. Emery, Barnard, and one to Mrs. Frank Coffey, Hays. Our state chairman cannot report our activities unless these notices are sent to her. These should be in her possession by the twentieth of the month.

Let the Hygeia goal be "More than last year". Stress the importance of Hygeia. Mrs. Earl F. Clark of Belle Plaine is your state chairman and I know she has loads of material and suggestions for you.

Don't forget your Advisory Board should be your helpmate in every way.

Sponsor health talks at every opportunity. Let us all become state minded and more national minded.

The accomplishments of the year depend upon you. Your state officers and chairmen are at your service, so please don't forget to call upon us.

-Mrs. R. W. Urie.

The Press-Publicity Chairman has asked several of the state officers and committee chairmen to contribute articles on subjects pertinent to their positions.

The first of these articles is herewith published: Kansas "Auxiliary's Needs" by Mrs. L. B. Gloyne, Kansas City, Organization Chairman.

It is a privilege to bring to you a message on "Auxiliary Needs."

As a past president I realize how utterly impossible it would be for one person to feel that anything had been accomplished during her term of office were it not for the loyalty and cooperation of the many members who make up our wonderful organization.

A happy and interested group of productive workers is a jewel in the crown of any executive.

The greatest need in the state auxiliary for the coming year is the organizing of an auxiliary in every county where a county medical society is organized, in order that we will be able to assist and achieve more for the medical profession in legislative matters next year. Truly we need the assistance of these county medical societies.

As the auxiliary grows in numbers, the oppor-

tunities for program, service and work broadens.

To every real worker there is a path ahead, and how far she goes depends upon herself. This is one of the grandest attributes of a real organization.

It is with this thought that I emphasize the necessity of more individual interest, enthusiasm. effort and responsibility.

Some of the other needs for fullfilling the objectives of the auxiliary are:

Study: Our leaders urge us to study. We need more health education programs. For where is there a better opportunity to have the true presentation of medical problems with free discussion, than at our auxiliary meetings?

Enthusiasm: We must have enthusiastic and interested workers to produce work that strengthens and develops the auxiliary. We need Knowledge plus enthusiasm and work to achieve success.

Sportsmanship: Real one hundred per cent workers and one hundred per cent sportsmen work to win. They strive to gain the objective; they have ambition and they utilize their energies and strength.

Without loyalty there is no cooperation, no service. To be loyal and faithful to one's duty is to be there when needed.

To be reliable is to be worthy of confidence, and one who is reliable can always be depended upon to perform her duty at the proper time in an effective manner. If one is reliable, her associates do not have to seek or wait for her when duty calls or the opportunity for service arrives, she is there, ready and fully equipped for the work to be performed.

Good fellowship means cooperation and mutual helpfulness. I sincerely believe that the spirit of good fellowship is the greatest asset an organization can have. There is no satisfaction like the feeling of expansion and growth toward an ideal, and this development of the individual is the finest characteristic of good fellowship.

I am confident that if each auxiliary member will feel her responsibility to meet the suggested needs that we will continue to have the loyal and whole hearted service that we have had in the past.

The following letters have been sent to all county press-publicity chairmen, one form to the new auxiliaries, the other to the older organizations.

Sent To The New Auxiliaries

I want to extend a warm welcome to the new auxiliaries which have so recently joined the state auxiliary. We are so glad to have you with us.

As Press-Publicity Chairman it is my duty to collect and publish in The Journal of The Kansas Medical Society at least a page of auxiliary notes. I must depend, of course, on the county press-publicity chairmen for news.

Will you not send me an account of your meetings, your purposes and accomplishments and vacation news of individual members.

If your auxiliary participates either as a whole



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A DOCTOR SAYS:

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Two Attendants-Everything Included

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or by individual members in civic activities such as P. T. A. work, cancer control, crippled children's clinics, Christmas seal promotion, etc. Please make such things a part of the news which you send me.

The auxiliary should strive for all favorable and ethical publicity possible. It all has its bearing on public health education. Please see that your local press receives accounts of your meetings.

In order to insure insertion in The Journal the clippings and reports should reach me not later than the twentieth of each month.

I am striving very hard to obtain cooperation from one-hundred per cent of the auxiliaries this year in order that we may have a newsy and instructive auxiliary department in The Journal.

I shall be very glad to give any assistance I can. With assurances, again, of a warm welcome to our organization and with best wishes for your success.

Sincerely yours, Frances T. Emery.

* * *

Sent To The Old Auxiliaries

Although the active season of auxiliary work is not, in most auxiliaries, before October, nevertheless plans must be made before activities begin. Hence this letter.

I made effort during the past auxiliary year to fill a page with auxiliary news, but, as only half the county auxiliaries sent in items regularly, the task was difficult.

If individuals are to work together efficiently it is necessary that they become acquainted; if they know each other they can help each other much better

To that end, the news of the activities of each county auxiliary published in The Journal of The Kansas Medical Society is our method of acquainting each other with our purposes and accomplishments.

Detailed descriptions of meetings, methods used in obtaining results, the part taken by auxiliaries in civic activities, the work done and places of prominence awarded to individual auxiliary members in lay clubs and civic work, vacation trips of members, marriages, deaths are all of interest to the members throughout the state. Such news should be forwarded to me at the earliest time possible.

It is advisable to have your local press publish accounts of your meetings.

May I not anticipate your full cooperation in this effort to help build the auxiliary?

Sincerely yours, Frances T. Emery.

Quoting Mrs. E. M. Hammes, President of the Minnesota Auxiliary: "I wish all small auxiliaries could know just how serious it is to have an auxiliary become inactive, and how much we want every doctor's wife in the organization and working in her particular group. I should like to emphasize the word 'work' both because there is plenty to be done—social, philanthropic and health education,

and because I believe that the harder an auxiliary works the healthier it is, the more efficient, and the more good the organization as a whole."

The editor of this department has always maintained that one of the most valuable services performed by the auxiliary is in bringing the doctors together by their social program, and thereby promoting closer acquaintance and better understanding and liking of each other.

Mrs. John L. Bauer, President of the New York Auxiliary, supports this idea as follows: "In many of our counties the doctors are not united by close bonds of friendship—more truly it may be said, they have their cliques of lay friends. I believe that a woman's auxiliary would bring the doctors more closely together and thus cement the friendships of the physicians."

It would be interesting to enumerate the auxiliary members who are affiliated with lay organizations; then ascertain how many of these lay organizations include a health committee or have sanitary projects. And, finally, learn how many auxiliary members are placed on such lay committees.

This information would be not only interesting but important, for, as Mrs. Herbert B. Henkel of Illinois pertinently states, "It (the auxiliary) is the public relations committee for the medical society, and, as such, has many opportunities to contact the laity through the many and various clubs and lay organizations to which the doctor's wife belongs".

Too much emphasis cannot be placed on this point. It is the key to successful public education.

Cloud County, with headquarters in Concordia, was organized March 25, 1937 with thirteen charter members. Although newly organized, news from Cloud County indicates that they have already been working actively.

The cancer control drive for funds in Concordia was directed most successfully by Mrs. C. D. Kosar, Mrs. John Porter, Mrs. E. N. Robertson, and Mrs. H. E. Doty. Their results exceeded Concordia's quota.

The entire auxiliary membership participated in the Crippled Children's clinic under the leadership of Mrs. Raymond Gelvin, chairman. Many of Cloud County members are active in P. T. A. work.

Building fires with kerosene cost the lives of twenty-one persons in Kansas during 1936.—Kansas State Board of Health.

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DIFFERENTIAL DIAGNOSIS IN PRIMARY HYPERTHYROIDISM, INCIPIENT TUBERCULOSIS, AND NEUROCIRCULATORY ASTHENIA

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It is good practice to review, from time to time, our knowledge regarding some medical problem. The great strides made each decade in our profession keep open the portals for every subject in medicine. A review often fixes the knowledge thus attained so that we are ever alert to the presence or absence of that particular clinical entity. Good differential diagnoses demand a clear cut picture of signs and symptoms characteristic of each disease.

In going over my records I find three disorders which have offered diagnostic difficulties. These are early hyperthyroidism, incipient tuberculosis, and neurocirculatory asthenia. A medical student may make a correct diagnosis when the disease is well advanced, or when a classical symptomatology is present. But, I shall call to your attention the mild and early conditions which demand careful histories. thorough physical examinations, and sometimes extensive laboratory procedures before a correct diagnosis can be made.

The cause of this diagnostic difficulty lies in the fact that in all three conditions there are (1) the close parallelism of objective signs and subjective symptoms, (2) the co-existence of these disorders, (3) the frequency of atypical cases, (4) the frequency of enlarged thyroid glands, and (5) the frequency of signs and symptoms caused by stimulation of the sympathetic nervous system.

The diagnostic difficulties are pronounced when a patient, suffering with incipient tuber-culosis or neurocirculatory asthenia, has an enlarged thyroid gland and exophthalmos.

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This association is not an uncommon one, as Tice¹ speaks of frequent symmetrical thyroid enlargement in incipient tuberculosis. Fishberg² found that enlargement of the gland is not rare in youthful tubercular patients, and that mild exophthalmos is not uncommon. Norris and Landis³ found that one out of sixteen tubercular patients showed thyroid enlargement. They found that many of these patients showed eye signs as well.

In neurocirculatory asthenia, Friedlander and Freyhof⁴ found that twenty per cent of the patients had enlarged thyroid glands, and that six per cent had a mild exophthalmos. Cohn⁵ speaks of an enlarged gland and prominence of the eyes in this group.

An early diagnosis is particularly important in these three disorders. In tuberculosis, for instance, an early diagnosis may mean the saving of a life, not forgetting the saving of time and money. I know that we feel proud of the fact that in thirty-five years we have reduced the mortality in tuberculosis from 275 per 100,000 to fifty-six and six-tenths per 100,-000; but, we shall not be so proud of our accomplishment when we find that there has been no great variation in the proportion of early cases admitted to sanatoria in the past twenty years. It has varied between twelve and seventeen per cent. The results of the latest survey6 show that about thirteen per cent of all pulmonary cases admitted are in the minimal stage. Think of the many lives the medical profession could save if the percentage of early diagnosis in tuberculosis were increased.

An early diagnosis is equally important in neurocirculatory asthenia. Sir Thomas Lewis⁷ has sounded a warning note in regard to the treatment of this type patient. He must not be put to bed. If we do, he deteriorates in health and becomes undisciplined. His complaints become exaggerated and resistant to treatment. An early diagnosis is absolutely essential in order that we may, from the very start, deal with

this patient openly and above board; tell him the exact status of his disorder, that he is not seriously ill, that he will completely recover, and that he must get interested in some activity.

An early diagnosis is equally important in primary hyperthyroidism. There is great danger in overlooking this disease. I am familiar with the histories of at least five patients who have lost their lives because primary hyperthyroidism was not recognized early. A tonsillectomy, the extraction of teeth, or a uterine curettement produced a thyroid crisis, which resulted in death to the patient.

The following table illustrates the number of signs and symptoms common to all three entities.

	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	$\sim\sim$	~~~	~~~
		Tuberculosis	Neurocircula- tory asthenia	Hyper- thyroidism
1.	Onset, insidious	+	+	+
2.	Loss of weight	+	+	+
	Loss of strength	+	+	+
	Loss of endurance	+	+	+
	Elevation of temperature	+	+	+
	Pain in the chest	+	+	+
	Shortness of breath	+	+	+
8.	Irritability, nervousness	+	+	+
9.	Rapid pulse	+	+	+
10.	Palpitation	+	+	
11.	Diarrhea	+	+	
12.	Insomnia	+	+	+
13.	Enlarged thyroid gland	+	+	+
	Menstrual irregularities	+	+	+
	Tremor	-?	+	+
16.	Sweats	+	+	+
17.	Unstable vasomotor system,			
	moist hands, dizziness, flush-			
	ing, sensation of heat	+	+	+
18.	Nausea, vomiting, eructations			

It is my opinion that both the war and the depression have been factors in stirring up a latent condition in these disorders, and that now we see more patients suffering with primary hyperthyroidism and neurocirculatory asthenia than in previous periods of history.

It is quite obvious, then, from what I have mentioned regarding the diagnostic difficulties encountered, and regarding the dangers of late diagnosis, that we must familiarize ourselves with the picture of the signs and symptoms of these three disorders.

#### PRIMARY HYPERTHYROIDISM

Primary hyperthyroidism or exophthalmic goiter, as it is commonly called, was first discovered by Parry in 1786, who is not given credit for this discovery. This disease was later rediscovered and described by Graves in 1835. and by Von Basedow in 1840. It is thought today that this clinical entity is a constitutional disease with a disturbed secretion of the thyroid gland. It is characterized by an increased basal metabolic rate. Some authorities claim that there is a characteristic dysfunction in the metabolism of cholesterol. The etiological factors playing a role in this disease are the wear and tear of our highly civilized life, heredity, constitutional make-up, and racial characteristics. The exact factor which sets off the shot is unknown. Is it infectious, traumatic (physical or psychical), or nutritional? Females are more prone to develop this disease. in a ratio of five females to one male. The peak is reached between the ages of thirty-one and thirty-five. The symptoms are due to the increased basal metabolic rate, with secondary manifestations in the nervous, cardio-vascular, gastro-intestinal, and respiratory systems.

The cardinal signs, of course, are the enlarged thyroid, various eye changes (exophthalmos, wide fissure, lid lag, poor convergence, infrequent winking), the tremor, and the tachycardia. The signs produced in the cardiovascular system are usually quite characteristic of this disease. Here we have a hyperactive heart, with a rapid pulse which persists even in sleep and at rest. There is a relaxation of the muscle coat of the arteries, which results in a dilated atterial bed This causes a decrease in diastolic blood pressure and an increase of the pulse pressure.

The symptoms are variable. The sense of fatigue, associated with a nervous excitability, is in the foreground. Palpitation is frequently one of the first symptoms which is noticed. Despite the abnormal appetite, these patients lose weight. They complain of a sense of warmth and increased perspiration. Nervous manifestations are marked. The hands show a fine tremor, the patients are irritable and are prone to lose their temper.

All of these signs and symptoms may be present in the classical case. There is, however, a frequency of atypical cases, in which one or more of these findings and symptoms are lacking. We must be on the lookout for these atypical cases.

The laboratory procedures reveal an increased basal metabolic rate, and quite frequently a low cholesterol reading.

#### INCIPIENT TUBERCULOSIS

For thirty-five years it has been the aim of the medical profession to find diagnostic criteria upon which to base a diagnosis of early tuberculosis. It still remains a problem. Statistics reveal that only one out of every eight patients admitted to our sanatoria is classified as suffering with minimal tuberculosis. "The first requisite for early diagnosis is that the thought of this disease should be always in mind."

The early signs of tuberculosis seldom direct attention to pathological changes in the lung. The symptoms are usually vague and indefinite. The critical period is between the ages of fifteen and twenty-five. It is well to remember that pulmonary tuberculosis may exist without any suggestion of ill health.

A careful history is important. Great significance must be attached to history of contact with a case of known tuberculosis. The constitutional symptoms of malaise, increasing nervousness, loss of appetite, loss of weight, strength, and endurance (undue fatigue), and night sweats tell us that the patient is ill. But, the occurrence of such localized symptoms as cough, expectoration, hemoptysis (a teaspoonful or more), and chest pains focuses our attention upon the lungs.

The physical signs reveal a slight fever and a rapid pulse of small volume, easily affected by exertion, and constantly elevated even at rest. The pulse pressure is decreased. Any rales, whether fine, crepitant or moist, heard best in the inspiratory phase following a short cough, audible over the apex or subapex of an upper or lower lobe are almost diagnostic. The sputum should be examined repeatedly; a negative finding does not exclude the presence of early tuberculosis. Where numerous sputum examinations are negative, guinea pig inoculation might reveal tuberculosis. A radiograph always should be made, as some early lesions give no physical signs, and only can be discovered by this procedure. A tuberculin test should be made. A positive reaction in an adult is of little significance, but a negative reaction usually excludes tuberculosis.

It is well to keep in mind the fact that (1) pulmonary tuberculosis may exist without the occurrence of demonstrable physical signs, (2) that the absence of tubercle bacilli in the sputum means only that bronchial ulceration has not

occurred, (3) that radiographs may be negative and at the same time the patient show tubercle bacilli in the sputum, and (4) that the radiograph may reveal lesions which appear tuberculous, even though the patient is not ill, and never has been ill.

#### NEUROCIRCULATORY ASTHENIA

Neurocirculatory asthenia is in reality not a disease but a syndrome. It is interesting to know that DaCosta9 described it in 1871 as "irritable heart", and noted that the same affection was mentioned as having occurred in the Crimean war and in Havelock's troops in India. In the recent World War it became known as the "soldier's heart", and later the British called it "disordered action of the heart", while Sir Thomas Lewis devised the "effort syndrome". After DeCosta's description the subject was forgotten until the World War, when, because of the large number of soldiers sent back from the front to England, the condition was again recognized, and thought to be worthy of a thorough investigation.

In this country we employ the general term, neurocirculatory asthenia as it designates a neurasthenic state, exhibiting circulatory symptoms. This term, then, does not limit the "picture" seen to soldiers, to effort, to irritability, or to cardiac neurosis. It suggests an abnormal response to effort and to excitement, occurring both in civilians and soldiers, with a preponderance of symptoms in the cardiovascular system.

At this point it might be well to keep in mind the fact that, in a normal individual, sufficient severe physical effort will produce circulatory symptoms, such as dyspnea, palpitation, precordial distress, dizziness, and faintness. To mild physical or mental activity the normal individual shows no reaction, but the neurocirculatory asthenic individual, under the same circumstances, will probably "go to pieces".

Today, the syndrome is quite common in civilian life, occurring in women and children as well as in men; it is most common in young adults, occurring more frequently between the ages of twenty and forty. The constitutional make-up is important in this picture. We see an individual physically subnormal; a thin, visceroptotic individual with poorly developed muscles, a sensitive nervous system, and, not infrequently, mentally unstable. However, we may encounter one who is well developed, and who shows no signs of physical inferiority.

The history reveals that the individual was always below par under mental or physical stress and strain. Quite frequently we note the presence of this syndrome after an acute or chronic infection.

The symptoms will depend upon the degree of neurocirculatory asthenia. In the well developed case the symptoms will be found in the cardio-vascular, respiratory, gastro-intestinal, and nervous systems, closely paralleling the sypmtoms found in the previously described two diseases. The common complaints are shortness of breath on slight exertion (frequent sighing), fatigue, chest pains (dull, heavy ache, lasting for hours, and not radiating), fainting spells, attacks of dizziness, palpitation, and excessive perspiration. The degree of fatigue serves as an excellent index of the severity of the affection.

The physical signs reveal cyanotic and cold extremities, coarse tremors, marked perspiration, and mottled skin. The heart is rapid, and the apex impulse is hyperactive. Sinus arrhythmia is very common. With rest and a calm atmosphere the rate and activity may return to normal. The individual has a worried expression, flushed face, and a quickened respira-

The laboratory tests reveal nothing signifi-

True heart disease, with its tell tale findings, must be ruled out before we make a diagnosis of neurocirculatory asthenia.

#### SUMMARY

I have called attention to three clinical entities, frequently found in general practice, which show a similarity of signs and symptoms. It is hoped that this review will spur on the effort to find the early cases of tuberculosis, to lessen invalidism in neurocirculatory asthenia, and to diagnose correctly primary hyperthyroidism.

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#### THE FUNDAMENTALS OF DIAGNOSIS AND TREATMENT OF ARTHRITIS*

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#### INTRODUCTION

A few years ago, while collecting material for my illustrated monograph, I found reference in the literature to more than forty varieties of arthritis and even today there are major differences of opinion with regard to an accurate and scientific classification. Discussions of causal factors are apt to be even more controversial in character.

#### MODERN CONCEPT

It is exceedingly fortunate that we do not have to bring into our discussion tonight either nomenclature or etiology. However, as a necessary preliminary to our consideration of the fundamentals of diagnosis and treatment we should have clearly in mind one fact, which is that evidences of structural changes in joints and related tissues are only surface indications of an altered condition of the body as a whole. Just as the swollen feet and legs of a nephritic and the well-known gait of an ataxic patient are merely outward manifestations of a constitutional disease, so are the joint changes in the case of the arthritic.

#### CLINICAL GROUPS

Leaving out of consideration the relatively rare cases of "mixed" arthritis and gout, it may be said that about ninety per cent of the patients coming under our observation comprise two distinct clinical groups.

In the first, the age of onset is commonly above forty-five, obesity, hypertension and functional disturbances of the gastro-intestinal tract are frequently encountered: while normal sedimentation rates, leucopenic indices and temperatures and negative agglutination reactions predominate. Furthermore, there is rarely any history of infection.

Patients with this type of the disease almost never complain of cold hands or feet. The joint involvement is often asymmetrical in distribution and rarely generalized. The larger joints, (particularly the knees), are affected early. Limitation of joint movements is a very gradual development that is unaccompanied by migratory pains and not characterized by muscle atrophy. Heberden's nodes are frequent.

^{*}Presented before the Sedgwick County Society, Wichita, Kansas,

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Ankylosis is exceedingly rare and never complete.

In the second group, the age of onset is considerably earlier; undernourishment, occasional slight elevations of temperature and anemia are common: while greatly increased sedimentation rates, reduced leucopenic indices and positive agglutination reactions in high titres are found in the majority of active cases. Such patients, moreover, often present evidences of visceroptosis and the history of prior infection is the rule and not the exception.

There is regularly a more or less early and bilaterally symmetrical involvement of the smaller joints of the hands and feet; there is early limitation of joint movements from pain, stiffness and swelling; the joint enlargement is usually fusiform; muscle atrophy is frequent and ultimate disability from ankylosis commonly completes the picture.

These fundamentals of differential diagnosis are so simple and explicit that doctors generally should be able to classify their patients both easily and accurately. Furthermore, in the vast majority of instances a correct diagnosis may be made without the aid of intricate laboratory tests or extensive x-ray studies.

#### GENERAL PRINCIPLES OF TREATMENT

Some patients believe that arthritic pains, like the wicked, will flee when no man pursueth; but I can assure you that they make better time when the doctor takes after them.

Chronic arthritis is not a disease that develops over night and it takes time for these patients to get well. Moreover, this business of treating chronic arthritis is not a one-sided affair. Therefore, the first principle is—or should be—that the doctor "put all the cards on the table" and unless the patient is prepared to "play the game through to the end", it is far better not to start at all.

Our second principle of treatment is that patients in one clinical group require a materially different composite program of therapy from those in the other.

A third principle stresses the fact that every patient presents a separate and distinct treatment problem and that it is no more logical to expect all patients to respond uniformly to the same measures than that they will get an equal degree of benefit from a game of golf.

Finally, between eighty-five per cent and ninety per cent of all deformities are preventable and to neglect to promptly initiate ways and means to prevent flexion contractures and other deformities is most reprehensible.

#### SPECIAL TREATMENT METHODS

Since chronic arthritis presents problems of both a local and a systemic character it is clear that single-phase therapeutic programs are bound to be disappointing. Just ordinary common sense should convince us that there can be no single panacea for all patients in both clinical groups. Surely, arthritics who present evidences of undernourishment and anemia will not respond to the same measures that will benefit obese, full-blooded, hypertensive patients,

As a broad generalization, foci of infection should be sought for and removed from patients in one clinical group, while the traumatic effects of overweight, postural defects, occupational influences, etc., should be minimized or eliminated in the case of those in the other classification.

Rest: The majority of patients have heard altogether too much about the need for exercise and not anywhere nearly enough about the importance of rest.

Diet: There is no such thing as "arthritis diet". Undernourished patients may or may not require additional calories, while overweight arthritics usually present problems in mechanics as well as in dietetics.

Heliotherapy: The benefits of a warm, dry and sunny climate, with minimal barometric fluctuations are beyond question, and the value of such a climate is due largely to the fact that it facilitates direct sun-baths.

Physical therapy: Most of the benefits derived from physical agents are attributable to the value of heat in improving circulation, releiving pain and muscle spasm and promoting healing. The types of equipment for the production of dry, moist and radiant heat, shortwave currents and other modalities, artificial fever, etc., are both numerous and varied. Paraffin baths for the treatment of arthritis of the hands and feet are of outstanding value.

Drugs: Various pharmaceutical preparations are employed for the relief of pain and muscle spasm. At our clinic we have discontinued the use of colloidal sulphur and we regard the hazards of gold therapy as at least equal to the probable benefits to be derived.

Focal removals: We have gotten into trouble occasionally by letting our enthusiasm get the better of our judgment, but these errors have

been mostly of degree rather than of kind. Let us take the matter of focal removals by way of example. After the etiological relationship of infective foci was established more than thirty years ago, we erroneously assumed that all we had to do was remove the infection and a cure would promptly follow. At that time we believed that the treatment of infectious arthritis was entirely a matter of removing the cause. Later, we learned that it was not as simple as this and we now know that focal removals initiate but do not constitute adequate therapy. The main point is not that focal removals were ever wrong in principle, but merely that they were expected to accomplish the impossible and today the great importance of eliminating foci of infection is more firmly established than ever before.

Vaccine therapy: Vaccines provide another instance of a valuable method of treatment that has had its "ups and downs". (I am using the term vaccine therapy to include various types of antigenic biologicals). A decade or two ago it was thought that a cure-all had been discovered in vaccines. Today we have abundant clinical and laboratory evidence that vaccines are highly beneficial in a very large percentage of properly selected patients with the infectious type of the disease. Here again, we are keeping well within the bounds of common sense because the stimulation of the natural curative forces of the body by antigenic substances is a logical as well as an effective procedure.

Induced jaundice: It has long been known that patients with chronic infectious arthritis and fibrositis have experienced more or less complete relief, for varying periods of time, following an attack of intercurrent jaundice. Such cases have been reported by ourselves and others. It has been clearly apparent that if Nature's method could be duplicated a great forward step in the control of arthritis would be achieved.

Last June my associate Dr. Thompson and I presented to the members of the American Association for the Study and Control of Rheumatic Diseases, at Atlantic City, the first successful technic and compound for inducing a safe and non-toxic jaundice.

Our technic for the induction of jaundice was based upon a long period of study and experimental investigation. This paper will be off the press shortly and is devoted to a de-

tailed consideration of the purely scientific aspects of our research.

Briefly, and confirming the findings of Race, we observed that serum bilirubin levels are lower in patients with chronic infectious arthritis than in normal individuals. Upon working with rabbits and administering repeated does of bilirubin dissolved in a sodium carbonate solution, to which was subsequently added the sodium salt of dehydrocholic acid, it was discovered that the production of jaundice resulted and that the animals suffered no ill effects from daily injections of our compound.

After establishing the safety of our method in this manner we felt justified in proposing the induction of jaundice to a selected group of patients who were not responding satisfactorily to conventional programs of treatment. After from one to eleven injections of our preparation, a reversal of their symptoms followed so suddenly and dramatically that the similarity between these results and those noted in patients who had developed jaundice naturally was most striking.

It was found that there was an analgesic serum bilirubin level and that observable jaundice did not disappear until from two to three or more weeks following the final injection of our compound.

I want to present, in a very few words, the feeling that Dr. Thompson and I have regarding the significance of our research:

- (a) While the mechanisms involved in the response of patients to induced jaundice are not the same as in the case of focal removals, the benefits, nevertheless, are comparable and even superior to them in a considerable number of instances.
- (b) The product and technic developed by us induce an artificial jaundice which apparently duplicates the effects reported by various observers when clinical jaundice has intervened in such patients.
- (c) Since a return of the arthritic or fibrositic symptoms may follow a clinical jaundice, after varying periods of time, and, in view of the fact that the duration of the benefits of artificial jaundice is seemingly subject to similar possibilities, it is desirable to prolong the effects as long as possible. This is especially important since it is not possible to foretell how long our apparent duplication of Nature's mechanisms will remain operative.
  - (d) The induction of artificial jaundice,

therefore, should be followed up routinely by increased rest—both local and general—and the stimulation of the natural curative forces of the body by antigens and other means.

#### CONCLUSIONS

Time will not permit me to discuss the various problems of joint management involving the non-surgical and surgical correction of faulty body mechanics and deformities, the relief of pain and the restoration of joint functions.

In this necessarily cursory review of the essentials of diagnosis and treatment, it has only been possible to "hit the high spots". It is my hope, however, that some of the haziness that seems to surround the subject of arthritis may have been clarified a little. Whatever differences of opinion may exist regarding nomenclature and classification, it should be apparent that these matters, which are largely of academic interest, ought not to obscure our appreciation of the simplicity and practicability of the ways and means of putting this vast group of invalids on the road to recovery.

Very few of those who are now afflicted had the benefit of early diagnosis and treatment for the reason that little or no attention was

paid by them to the early warnings.

Every year that an arthritis exists without treatment affects the chances of complete recovery to some extent, even though such delays vary in their importance to different patients. Chronic arthritis, however, can no longer be classed among the so-called "incurable" di-

seases.

In our prognoses we must never hold out hopes beyond the possibilities of realization; but, under present day conditions there are few chronic diseases that will respond more satisfactorily to proper therapy. In fact, without any major additions to our present knowledge, we can eliminate most of the toll of suffering and disability that is now being exacted by arthritis, which, in itself, should greatly further the widespread recognition and appreciation of the progress of scientific medicine in this and many other important fields.

Gilbert: "Monsieur, I am anxious to be a physician." Rousseau: "A noble profession in which you may choose between real science, ever modest and self effacing, and quackery, ever noisy and empty. If you would become a physician, young man, study: if a quack, nothing but impudence and effrontery are necessary."— Memories of a Physician—Dumas.

#### INSULIN THERAPY IN ACUTE ALCOHOLIC PSYCHOSES

A Study of Nine Successive Cases of Alcoholic Psychoses Treated with Insulin

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The control of withdrawal symptoms in alcoholism, and the treatment of complications which so often appear, have always been difficult problems.

Extreme nervousness may be controlled with various hypnotic drugs, but when administered in sufficient amounts to produce the required results, these drugs are toxic to the individual under treatment. This toxic reaction aggravates and prolongs the symptoms and in many cases superimposes an additional addiction upon the alcoholism.

We have been on the alert to find some method of treatment which controls the nervousness but is neither toxic nor habit-forming. Sakel and his co-workers focused attention upon the use of insulin in various psychiatric conditions. Sakel¹ pointed out in 1930 that insulin in large doses would control the withdrawal symptoms in the treatment of morphine addiction. This has been confirmed many times. Since the two conditions are closely related, this use of insulin led us to believe it might be effective in controlling the withdrawal symptoms of alcoholism. We find it highly successful, and at some future date will report our results on a large series of cases.

Shortly after beginning the use of insulin in the treatment of alcoholism, we admitted a case of acute hallucinosis with insomnia, delusions, hallucinations, complete disorientation, and occasional attacks of extreme, serious mania. Seven hours after admission to the hospital, and one and one-half hours after the second dose of twenty units of insulin, we were surprised to find that these symptoms

had cleared completely.

Fortunately, for the purposes of this paper, we admitted an unusually large number of acute alcoholic psychoses during the succeeding three months. Each of these cases received insulin. The early cases were given glucose intravenously and spirits. The later cases received insulin alone. Sedatives and hypnotics were used sparingly on a part of the cases. No opiates were given at any time during their hospitalization. Our results have been made the basis of this paper.

#### TECHNIQUE OF TREATMENT

Realization of the beneficial effects of insulin in this type of case came to us more or less fortuitously, and in all of our cases herein reported, the insulin was used experimentally. After two or three cases had passed through this procedure, we determined that forty or fifty units divided into two doses should be effective in the uncomplicated cases, but we did not set an inflexible standard. We adopted the principle that the amount of insulin indicated in an individual case is whatever amount is sufficient to produce the desired results.

Uncomplicated cases responded to the following technique: twenty units of insulin are given sub-cutaneously immediately upon admission. During the next three hours, the patient is urged to drink all the orange juice that can be forced. The second injection of twenty units is given three hours after the first. The minimum requirement of orange juice to prevent reaction from the second dose seems to be at least thirty ounces. Ordinarily, the first dose will have no effect upon the patient other than to produce hunger and, from that, cooperation in the taking of fluids and nourishment. The mental symptoms usually are not improved until after the second injection of insulin. Onehalf hour to an hour following the second dose, the patient begins to quiet down, and soon falls asleep. Sleep may be fitful for a few hours, but it is our experience that from three to five hours after the second dose the patient falls into a deep sleep, from which he awakens clear. The psychosis may or may not return following this sleep. A small dose of insulin is given shortly after the patient awakes, and thereafter no more insulin is used unless the psychosis returns or the patient is not completely clear. If further injection of insulin is thus indicated, at least four hours should elapse between the awakening and the resuming of treatment. During this four-hour period, carbohydrates are forced by every possible means, and the above routine of administering insulin is repeated at the end of this period. In all uncomplicated cases the patient should be clear following the second series of insulin injections. If he is not, then we assume there is some complication, inflammatory or otherwise, which is delaying results. Six of our cases responded perfectly according to the above technique when sufficient treatment was given. The other three were complicated, two with an upper respiratory infection, the other with syphilis.

#### CASE REPORTS

Case No. 1—O. W., age 51, was admitted to the hospital April 17, 1937. His son gave a history of chronic alcoholism dating back approximately fifteen years. During that period there had been only about four or five days pass in which he had not had some alcohol. The average daily dose was about 12 ounces of alcohol, taken as beer or whiskey. On April 7 he signed the pledge to stop drinking. The next day he felt well, but extremely nervous. On April 9, he became very excited, and on April 10 was admitted to a hospital in his community. He was treated with sedation, morphine, etc. After a week under the above treatment, his condition gradually became worse he was transferred to the Neurological Hospital. At the time of admission, he had had no food for three days, and had not slept for four nights, even after heavy sedation. He was admitted to the hospital at 6:45 P.M. Examination revealed complete disorientation, complete loss of memory, constant, violent, fluctuating hallucinations and delusions, extreme restlessness, mumbling and carphology. The blood sugar on admission was 108, pulse 123, temperature 97.2 degrees. At 7:10 P.M. he was given 20 grams of glucose intravenously. At 7:20 P.M. he was given 20 units of insulin. At 8:27 he received 20 grams of glucose. During the next hour and a half he drank 24 ounces of orange juice, the first nourishment that he had taken by mouth in 72 hours. At 10:00 P.M. he began to perspire freely. One ounce of spirits was given at 11 o'clock. At 11:10 he received 20 units of insulin, followed by 12 ounces of orange juice. There had been no change in his psychosis. Free perspiration continued. At 1:35 A.M. the patient dropped off to sleep and slept until 7:30 A.M. At 6:00 A.M. his pulse was 99. The morning blood sugar was 62. He ate a good breakfast, read the morning papers and, except for a mild nervousness, was completely clear and relieved of all psychotic manifestations. He had an excellent morning, and ate a heavy lunch. At 2:15 he became slightly disturbed and his psychosis returned, but in a much milder form. His pulse began to rise and soon reached 110.

At 2:22 P.M. he was given 20 units of insulin, followed by large quantities of orange juice, and at 3:30 he was quiet and clear. At 4:30 he dropped off to sleep. He awakened at 11:20. At 1:00 A.M. he was given 10 units of insulin, followed by orange juice. He seemed completely clear, and except for a mild excitement and talkativeness, had no abnormal or unusual manifestations. He did not sleep any more that night, but he had had his usual amount of sleep early in the evening. On the morning of April 19, as an added precaution, he was given 50cc of glucose and 20 units of insulin. His course for the next three weeks while he was in the hospital was completely uneventful. He was clear, cooperative, stable, slept well, ate well, and appeared to us and to his family as being normal. The only abnormality noted was that the pulse did not return to normal until the fourth day in the hospital. From the morning of April 19 until his discharge from the hospital all his laboratory findings were normal. No physical abnormalities were found upon physical examinations.

Case No. 2—H. W., age 40, was admitted to the hospital on April 18, 1937. He gave a history of excessive use of spirits for five years prior to October, 1936. At that time he developed a severe alcoholic neuritis. He stopped spirits for a few days, but his nervous reaction was so intense that on the advice of his physician he began to drink a high proof wine, which he was told would not aggravate his neuritis. During the six months before his admission to the hospital he had been drinking a quart of 40 proof wine a day, and had been taking three grains of amytal each night for insomnia. He was admitted voluntarily, clear and lucid, but moderately intoxicated. That night he was given insulin and carbohydrates in accordance with our insulin routine. He had a fair night. His blood sugar determination the following morning was 80. At 7:35 that morning he was given 20 more units of insulin. He ate a good breakfast and at 9:45 received 20 grams of glucose intravenously. He was quite nervous. He had received no alcohol and no sedatives, and it was thought advisable to give him some more insulin. This was in the early

stages of our insulin approach to these cases, and in light of our experience since then we would not have given him this dose. He received it at 9:50, and at 11:05 had a generalized convulsion lasting 15 minutes. At the end of the convulsion. the blood sugar was 43. Of course, in retrospect, we feel that the last dose, making 80 units in 15 hours, was a mistake. However, following the convulsion he was quiet, relaxed, ate a good lunch, and had a very fair day. The blood sugar determination at 1:30 P.M. was 102. During the next three days he had small doses of insulin to control minor withdrawal symptoms. His course was uneventful. On April 22 the Lambert method of detoxification was started. This consists of purging and hourly doses of the Lambert solution, and lasts 60 hours. His course was uneventful. He slept well and ate well during the treatment. At about an hour before the termination of the treatment, it was noticed that he was acting queerly, having hallucinations of a definite form. These were very transitory, but gradually became more intense. At 7:45 he was quite confused, and for the rest of the night was confused, restless, hallucinating badly and did not sleep. This reaction to the Lambert treatment is unusual, but is seen occasionally, especially in heavy, chronic, daily drinkers. We consider it to be a type of acute hallucinosis with the same etiological background as that seen in uncomplicated alcoholism. We felt that heavy doses of insulin were indicated, but we were somewhat hesitant to use this procedure in light of our experience with this patient, that is, the convulsion. However, after 24 hours the patient was definitely growing worse, and at 6:15 P.M. he received 20 units of insulin. The blood sugar at this time was 95. He was given quantities of orange juice, and began to perspire at 6:30. At 6:40 it was noticed that he was much quieter. At 7:15 he was given 20 units of insulin, at 9:45 he was quiet, and at 11:00 o'clock he was asleep. He slept nine hours, awoke clear, and ate a good breakfast. His course during the next four days was uneventful.

Case No. 3—J. C., age 47, was admitted to the hospital on May 5, 1937. He gave a history of both chronic and

periodical alcoholic experiences. It was his custom to take 1 ½ to 3 ounces of alcohol in highballs every evening after he left his office. Over the week-ends he would take from 16 to 32 ounces of alcohol in highballs and beer regularly. On Monday, May 3, he had become extremely nervous. agitated, and developed some mild hallucinations and delusions. He did not sleep Monday or Tuesday nights, even after receiving hyoscine, morphine and cactus in combination. On his admission to the hospital he was extremely nervous, disorientated, confused, was having violent hallucinations and delusions. He was admitted at 2:00 P.M. His blood sugar determination was 100. He was given the insulin routine as outlined under "technique", and at 5:30 seemed mentally clear. At 9:30 he dropped into a sound sleep and slept until 4:00 A.M. Upon awakening he seemed completely normal, ate a good breakfast, and his course until May 8, when he was discharged, was uneventful.

Case No. 4-J. A., aged 44, was admitted to the hospital May 10, 1937. He gave a history of excessive alcoholism over a period of ten years. During the six months before his admission to the hospital he had been drinking approximately three pints of whiskey a day, or 20 ounces of alcohol daily. His wife gave a history of gradually developing psychotic manifestations, paranoid trends, loss of responsibility, and she suspected that he had been having some mild hallucinations. He was admitted at 11:35 P.M. very intoxicated, and he slept soundly the rest of the night. He was quite nervous during the next 36 hours, and seemed to be hallucinating but we were not sure. Forty-eight hours after admission he became quite violent, and his hallucinations and delusions were quite marked. Because of a severe myocardial condition, we had hesitated to push insulin, and we held off even in the face of the psychosis. We treated him with dehydration and sedation, hoping to accomplish results without heavy insulin dosage. After 48 hours no results were apparent, and he was given the insulin routine. He dropped off to sleep after the second dose and awoke clear, but nervous. The nervousness soon cleared

up, and his course in the hospital from then on was uneventful.

Case No. 5-H. A., age 45, was admitted to the hospital on May 12, 1937. There is a history of excessive alcoholism for the preceding two months. About a week before his admission, the patient disappeared from his residence, and was not seen by any member of the family until the morning of his admission. He was brought directly to the hospital in a state of extreme dehydration and suffering from exposure. He had hallucinations and delusions, extreme restlessness, negativism and irritability. He was admitted at 12:15 P.M. His blood sugar determination at 12:30 was 180. This was rechecked. because it was hard to believe in light of his history. He refused all nourishment, and at 2:05 was given 25 grams of glucose intravenously. This was followed by the insulin routine. He quieted down during the day, and by midnight was asleep. He slept well, awoke clear, and apparently was relieved of his symptoms. His course throughout the balance of his stay in the hospital was uneventful.

Case No. 6-R. T., age 35, was admitted to the hospital May 27, 1937. This was his third admission for acute alcoholism. He had been drinking excessively for several years at periodical intervals. He showed no psychotic manifestations, but was very intoxicated and extremely euphoric. He was admitted at 2:45, and was given small doses of insulin for withdrawal. He was nervous and restless periodically until May 30. At 1:00 o'clock in the morning he became definitely psychotic, and progressed rapidly into a state of hypomania by morning. He was given the insulin routine, but unlike the other cases, his recovery was more by lysis than by a distinct crisis. He had a marked bronchitis upon admission, ran some fever periodically during his stay in the hospital, and we felt that this complication slowed his recovery. By June 1 he was completely clear, and remained so until his discharge from the hospital two days later.

Case No. 7—R. V., age 40, was admitted to the hospital on June 19, 1937. There was a history of serious periodical drinking extending over the last five years.

The frequency of these attacks had diminished somewhat during the past year, but on June 13 he became quite intoxicated and remained so during the next day, sobering up on June 15. He developed a gastro-intestinal condition on that day which lasted through June 16 and 17. On the night of June 17 he began to have active hallucinations, which became more marked throughout June 18, and he was admitted at 1:40 A.M. on the morning of June 19 in a highly nervous state, with some restlessness. He had not slept for three nights. On admission he presented nervousness, restlessness, but at that time did not mention any hallucinations. He was given 2 drams of a bromo-chloral mixture, and went to sleep, sleeping all night, into the next day and the next night. The next morning he informed us that he had had severe hallucinations all evening and all night. His blood sugar determination on the morning of June 20 was 96. That night he began to hallucinate badly again. Because of his very unusual and peculiar course, and the fact that his insomnia and nervousness were controlled with such a small quantity of hypnotics, we did not decide to use insulin until the night of June 22. He was given the insulin routine and responded nicely, but his psychosis returned several days later and the insulin was repeated. Again he cleared quickly, but the psychosis returned the third time. This time his recovery was a matter of only a few hours. The interval between these relapses was several days. This patient was luetic, and we felt that this factor was responsible for the relapses after he had apparently recovered.

Case No. 8—S. W., age 54, was admitted to the hospital on June 25, 1937, at 12:30 A.M. The history in this case is very confused, since there is a lapse of four days in which the patient was out of contact with his family, and he himself had complete amnesia for this period. The last that the patient himself remembers was leaving a sporting event on the night of June 18. The next contact with the patient was on the night of June 21, at which time he was found in a stuporous condition in his room at the hotel. There were several empty boxes which had con-

tained barbital in the room, and the hotel stated that he had ordered some beer on June 20. He was taken immediately to the city hospital, transferred to a private general hospital on June 22, where his course was uneventful until the night of June 24. At that time he developed violent hallucinations, delusions, nervousness and carphology. On admission to the Neurological Hospital he was restless, but went to sleep shortly and slept well for about four hours. Upon awakening the next morning, he was restless, irritable, antagonistic and seemed to be hallucinating. The night of June 25 was somewhat uneventful, but he was still hallucinating, and continued to do so during the day of June 26. At 5:10 he was given 20 units of insulin. He seemed to have a mild shock from this dosage, and we hesitated to give him any more that night. But he dropped off to sleep at 3:00 A.M., slept well until 7:00 o'clock. The day of June 27 was excellent, and his course was uneventful until his discharge on July 4.

Case No. 9-S. P., age 43, was admitted on June 30, 1937. He was a worker in an oil still, where the temperatures were excessive. Following the completion of his day's work, it was his custom to drink rather large quantities of spirits. The exact amount could never be determined. The weekend preceding admission he became very intoxicated, and on Monday went to work. Monday evening he came home with marked mental disturbances, manifesting themselves by delusions, illusions, confusion and marked sexual aberrations. Two days later he was admitted to the Neurological Hospital. At the time of admission we found it very difficult to communicate with him and evaluate his symptoms. He spoke very broken English, and no member of the staff could speak his native Czeck. He was admitted at 1:40. He was given the insulin routine and responded nicely, but the following day he became psychotic again, and due to the request of his family physician he was given no more insulin until the third day in the hospital. He was then given insulin again, and apparently completely recovered from his psychosis in about 36 hours. Following this, there seemed to be an occasional relapse of a

mild character, which cleared up spontaneously. This patient ran an irregular fever, a marked leucocytosis, and extensive Harpes Simplex. While his lungs seemed clear, he had paroxysms of coughing, and we felt definitely that the infection was in the upper respiratory regions. This undoubtedly delayed his recovery.

#### DISCUSSION

This presentation is a review of nine consecutive cases of acute alcoholic psychoses with control of symptoms by a new method. In evaluating our results, we must appreciate that many cases of this type recover spontaneously, but on the other hand there is a large percentage of cases who have symptoms over a prolonged period of time, and even though they apparently recover under older methods of treatment, they are frequently left morally and intellectually crippled for the rest of their lives.

Three illustrative cases have been treated in the Neurological Hospital during the past five years. The average length of stay in the hospital for these cases was six and one-half months. One case, on the surface, seemed to recover completely. The second case has not recovered, even though two years have passed since his discharge from the hospital. The third case is apparently emotionally stable, but is only an intellectual shell of his former self. The criteria of time element for evaluating results of treatment therefore are often misleading. We can only say that after proper treatment was instituted in these nine cases the average length of time for complete recovery from their symptoms was 1.3 days.

Piker and Cohn² reported the length of time necessary to relieve the psychosis under the combined treatment of spinal puncture, glucose and paraldehyde as 4.8 days. We, therefore, feel that on the surface our results in this small series of cases can be considered to be an improvement over the best method hitherto reported. Apparently every case made a complete recovery, and manifested no deterioration of their mental faculties at the time of their discharge from the hospital. Follow-up evidence is, of course, not conclusive, but all cases which have been discharged long enough from the hospital, with whom we have been able to maintain contact, have apparently not returned to their drinking habits.

We can offer no suitable single explanation as to the effectiveness of this treatment. Sakel

feels that his results in schizophrenia can be attributed to one or all of the following factors: emotional shock; stimulation of metabolism; detoxification. We feel that emotional shock can play no part in this therapeutic procedure. We rather believe that the carbohydrate metabolism stimulation, which in turn leads to detoxification, is the answer. There was no effort made on our part to lower the blood sugar or to produce shock. On the contrary, we forced carbohydrates, and in several cases raised the blood sugar, while the patient was under active treatment. We consider that the reaction, therefore, is not only one of hypoglycemia, but rather of increased carbohydrate metabolism plus, perhaps, some unknown action of insulin on the nervous system.

#### CONCLUSIONS

- 1—Insulin therapy in acute alcoholic psychoses is effective.
- 2—The average length of time from admission to complete resolution of symptoms under this treatment is 3.3 days, and the average length of time of resolution from the time of beginning proper therapy is 1.3 days.
- 3—Lowering of the blood sugar is of no importance, as results are obtained regardless of the heighth of the blood sugar.
- 4—With proper care and supervision no complications should be expected from this type of treatment, and it is possible that this method should replace former methods which lend themselves to frequent complications.
- 5—General diseases complicating the chief complaint will postpone recovery under this treatment, as it will under any other method.

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Of all the emblems of medicine the serpent is unquestionably the oldest and most significant. From temote times (four centuries before Aesculapius) it has been associated, if not directly with healing or health, at least with certain concomitant attributes of medicine, such as power and prudence or wisdom. However, although we do know that this association of the serpent with medicine is a very ancient one, it apparently began at various times, for various reasons, among various peoples, and there is a great deal of difference of opinion among scholars as to its actual source.—From Serpent Emblems Of Medicine by Harry L. Arnold, Jr., M.D., Journal Michigan State Medical Society, March 1937.

#### MASSIVE COLLAPSE OF THE LUNG FOLLOWING LOCAL ANESTHESIA

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In reviewing the literature on collapse of the lung we are impressed by the lack of case reports in which collapse has been recorded following the use of a local anesthetic agent. That collapse occurs in patients operated upon under local anesthesia is an established fact. The absence of case reports would indicate that the condition is rare, when in reality collapse follows local anesthesia in about the same proportion of cases as when the general anesthetic agent is used, if the same type of operation is considered. The great majority of cases operated upon with local anesthesia are of a minor nature and such patients are generally active immediately following the operation. Both of these factors reduce the probability of collapse.

Following are two case reports of collapse following local anesthesia.

#### CASE NO. 1

A white male, age 23, (No. 52104) was admitted on the surgical service September 26, 1934, with the chief complaint of left inguinal hernia. The history taken at that time showed that the patient had been operated upon in April, 1930, for ruptured appendix. This operation was performed under spinal anesthesia and lasted fifteen minutes. Following the operation the patient developed consolidation of the right lower lobe. This condition cleared up completely during the convalescence. The hernia for which the patient entered the hospital the second time had been present two years.

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Entrance examination showed the patient to have a mild upper respiratory infection for which he received treatment one week prior to the operation. Physical and laboratory examinations were essentially negative.

The patient received preoperative medication of morphine, gr. ½, and atropine, gr. 1/150. Local infiltration with one-half per cent novocaine was used and a left inguinal herniorrhaphy was performed. There were no technical complications.

On the first post-operative day the temperature rose to 103 degrees, the pulse from seventy-six to 120, and the respiration from eighteen to twenty-eight. Physical examination showed flatness, hyperresonance, and tubular breathing over the right upper lobe. There were also rales in the right lung base posteriorly. A flat plate of the chest showed the heart to be displaced far to the right, with shift of the entire mediastinal structure. The right diaphragm was elevated and the right base of the lung opaque. The right upper and middle lobes showed mottling. The left lung was clear.

During the subsequent three days the pulse, temperature, and respiration continued elevated. The patient developed a cough, productive of a thick tenacous sputum. On the third post-operative day the patient coughed up a considerable quantity of sputum and immediately felt much better. The pulse, temperature, and respiration suddenly dropped to near normal. X-ray plate taken on the fourth post-operative day showed the right chest to be almost completely normal with no displacement of the heart or mediastinal structures. At the time of discharge the lungs were entirely clear.

#### CASE NO. 2 A colored male aged 60, (No. 52986) was

#### CHART 1

REPORTER	DATE	OPERATION	DURATION	AGENT	TYPE OF COLLAPSE	DISPOSAL
Jackson & Lee (1)	1925	Herniorrhaphy	?	Loc. Novocaine	Massive	Died— 11th day
Mastics, Spittler, McNamee (2)	1927 1927 1927 1927	Herniorrhaphy Cholecystectomy Herniorrhaphy Herniorrhaphy	?	Loc. Novocaine Loc. Novocaine Novocaine Local	A . A	Well Died Well Well
Brunn & Bill (3)	1930	Herniorrhaphy	?	Local	Massive	Well
Eliason & McLaughlin (4)	1932	? 2	?	Local	Massive	?

admitted to the surgical service with the chief complaint of a right inguinal hernia. This hernia had been present for thirty-one years, but at no time during this period had the patient had any symptoms of strangulation. The past medical history was essentially negative except that the patient had had a cough and increased sputum for five or six days prior to admission. The physical examination was not remarkable except for the right inguinal hernia, occasional cough, and a thick, tenacous sputum. The blood pressure was 170/100. There was some arteriosclerosis present in the peripheral system. The laboratory findings were normal.

Local infiltration with one-half per cent novocaine was used as the anesthetic and a right inguinal herniorrhaphy was performed using the usual technique, the operation lasting forty minutes.

On the first post-operative day the patient developed a low grade fever of 101 degrees, a pulse of ninety-six, and respiration of twentyeight for a few hours, after which the temperature, pulse, and respiration returned to near normal. Physical examination showed dullness in the left chest with tubular breathing and diminished expansion on the left. X-ray plates showed a generalized cloudy appearance of the left lung with elevation of the left diaphragm and narrowing of the intercostal spaces on the left. There was no displacement of the heart or mediastinal structures. A diagnosis of massive left atelectasis was made. Subsequently the patient's cough became much worse and the amount of sputum increased.

The patient was given blow bottles and his position changed frequently, but since he cooperated poorly, little good resulted. Four days after the first x-ray plate a second was taken. This showed that the clouding of the left chest was gone but the diaphragm on the side continued to be elevated and the intercostal spaces were still narrowed.

Four days later, (eight days after the first plate) a third plate was taken. This showed the entire process to be practically gone and all structures returned to normal.

#### DISCUSSION

During the past fifteen years only eight cases of massive lung collapse following local anesthesia have been found reported. These cases are listed on Chart 1. It will be noted that most of them followed herniorrhaphy.

If the experience of others parallels that of

this clinic it will be found that the patient developing collapse under local anesthetic (or any other anesthetic) frequently has an upper respiratory infection at the time of operation or has had such an infection within a period of a week prior to the operation.

Collapse frequently occurs within the first three days following operation—usually within forty-eight hours, so that any unusual coughing, fever, or pain in the chest, occurring in this period must be investigated carefully for collapse.

Prophylaxis should be practiced in every case. A semi-Fowler's position, breathing exercises of at least ten deep breaths every waking hour, frequent changing of position from one side to the other, are all of value. If the patient does not or cannot breathe deeply of his own accord the use of CO2 gas or a rebreathing bag is of material value. When the condition has developed it must be treated as early as possible. All of the prophylactic measures are to be used. A good slap on the back is occasionally of value in dislodging a mucous plug. Bronchoscopy is of great value where a skilled operator is available. Blow bottles probably are of but slight value. Heavy medication is to be avoided, but it is always important to use enough sedative to dull pain so that the patient can breathe in comfort. In general the prognosis is excellent except when a complicating process supervenes.

The above case reports indicate that respiratory infections predispose to collapse of the lung. Local anaesthesia is not a safeguard against massive lung collapse.

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C. G. Salsbury, M.D., Medical Director of the Sage Memorial Hospital at Ganado, Arizona, reports in the July 1937 issue of Southwestern Medicine that in nearly ten years on the reservation, he has never seen a case of scarlet fever in an Indian, nor does he know of a doctor who has. However, according to Dr. Salsbury, Navajo children are, if possible, more susceptible to measles, mumps and chicken pox than are white children.

THE INFLUENCE OF THE SYMPATHETIC, PARASYMPATHETIC AND RETICULO-ENDOTHELIAL SYSTEMS ON EXPERIMENTAL HYPNOSIS AND CATATONIA*

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The physiology of the neurovegetative system is still incompletely studied and many of its functions are unknown. I have been unable to find any mention of the influence of the neurovegetative system in hypnosis.

In carrying out some experimental work on rabbits with different hypnotic drugs, in order to establish in the production of stuporous states some points of similarity with human catatonia, I have studied the influence of the neurovegetative system. Drugs were selected whose influences on the sympathetic and parasympathetic are well known and found practically constant in their effects by various authors who have experimented with their action.

Briefly, I summarize here the most important physiological actions of the drugs used in my experiments associated with luminal. Adrenalin, whose sympatheticotropic action is well known; atropine, which inhibits the parasympathetic, producing an effect comparable to the excitation of the cervical sympathetic; and pilocarpine, which stimulates the parasympathetic and is exactly antithetic in action to atropine, are of very common use in physiological tests and will not detain us here. The ergotamine, extracted from the ergot, has an antagonistic action toward adrenalin, while adrenalin, as we have said above, has a sympatheticotropic action—the ergotamine inhibits the sympathetic.

Calcium and potassium have been recently the subject of many studies. The actual prevailing conception about their action may be summarized as follows: The action of calcium is identical for each organ with that obtained by the excitation of the sympathetic, the ac-

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tion of potassium corresponds to the stimulation of the parasympathetic. The strict relation between Ca and H+ ions, on one hand, and K and OH ions on the other, observed by some authors, would bring about further links between sympaticotonia and acidosis (predominance of Ca and H ions) in the cellular medium and vagatonia and alkalosis (predominance of K and OH ions).

Beside these drugs, which act on the different branches of the autonomous nervous system, the trypan blue in saline solution (any vital dye may be used instead) has been used in order to block the reticulo-endothelial system, whose action seems to bear some relation to metabolism and particularly to the metabolism of lipoids, in which the narcotic substances introduced into the organism are mostly soluble. The idea followed was to observe if the blockage of the reticulo-endothelial system could have some influence on the establishment of experimental hypnosis and to note in such a way whether or not the system had some function on the metabolism of hypnotic substances.

#### FIRST SERIES

Eight lots of rabbits have been subjected to the experiments, each lot comprising five individuals of an average common weight and taken from the same breed. A first group of rabbits was injected every day with one centigram of luminal sodium by pound of body weight. They were considered as the control of the experiments and the effects noted on them considered as standard in comparison with the effects noted in the other groups.

The second group was injected with one centigram of luminal plus one tenth of a cc of a solution of adrenalin 1:1000.

The third group was injected with one centigram of luminal by pound, plus .2 cc of a solution of atropine sulphate 1:1000.

The fourth group was injected with one centigram of luminal by pound, plus .2 cc of a solution of pilocarpine hydrochloride.

The fifth group was injected with one centigram of luminal by pound, plus .2 cc of

#### TABLE 1

Group I Results Drug administered System excited System inhibited Remarks Luminal Stupor III III IV V VI VII VIIII ...... Sympathetic Luminal & adrenalin Absolute sympaticotonia Luminal & atropine Luminal & pilocarpine Parasympathetic Relative sympaticotonia Absolute vagotonia Parasympathetic Luminal & ergotamine Luminal & calcium Luminal & potassium Luminal & trypan blue H ions, sympathetic OH ions, parasympathetic Sympathetic Relative vagotonia Absolute sympaticotonia Absolute vagotonia Reticulo-endothelial from + to-

TABLE II
Injections Every Other Day

Days	Luminal	LumAdr.	LumAtr.	LumPiloc.	LumErgot.	
1	Stupor	Deep Stupor	Uncertain	Uncertain	Lively and Look- ing for Foods	
3	Stupor	Deep Stupor	Uncertain	Uncertain	Lively and Look- ing for Foods	
5	Stupor	Deep Stupor	Stupor Moderate	1 Death	More Lively Than Controls	
7	Stupor	Deep Stupor	Stupor Moderate	Moderate Stupor	More Lively Than Controls	
9	Stupor	Deep Stupor	Moderate Stupor	Moderate Stupor	More Lively Than Controls	
11	Stupor	Deep Stupor	Moderate Stupor	Less Than Control	More Lively Than Controls	
13	Stupor	Deep Stupor	Worse Than Control	Less Than Control	More Lively Than Controls	
15 Same for all groups.						
17	Better Tolerance	1 Death	Worse Than Control	Less Than Control	More Lively Than Controls	
19	Better Tolerance	1 Death	Worse Than Control	Less Than Control	More Lively Than Controls	
21	Better Tolerance	Deep Stupor	Worse Than Control	Less Than Control	More Lively Than Controls	
23	Better Tolerance	1 Death	Worse Than Control	Less Than Control	More Lively Than Controls	
. 25	Better Tolerance	Deep Stupor	Worse Than Control	Less Than Control	More Lively Than Controls	
No changes until	the 45th day.					
45	Better Tolerance	1 Death	Worse Than Control	Less Than Control	More Lively Than Controls	
47	Better Tolerance	Deep Stupor	Worse Than Control	Less Than Control	More Lively Than Controls	
No changes until the 59th day.						
59	Better Tolerance	Last Animal Dies	Worse Than Control	Less Than Control	More Lively Than Controls	
No changes of rea						
70	All the rest of	the animals are killed	d and their organs	examined.		

ernutin (preparation containing definite amounts of ergotamine).

The sixth group was injected with one centigram of luminal by pound, plus twenty-five centigrams of calcium chloride.

The seventh group was injected with one centigram of luminal by pound, plus five centigrams of potassium chloride.

The eighth group was injected with one centigram of luminal by pound, plus five cc of one per cent solution of trypan bluee.

All the solutions were prepared with normal saline and the injections given mostly intravenously, with a few subcutaneously. As to the effects observed when the injections were given subcutaneously, they were delayed but were not in any way different from those observed after the intravenous administration.

Previous to such experiments, some controls have been injected with all the drugs already mentioned, but using sodium chloride instead of luminal, in order to find out their isolated effects and the minimum amount to be injected without producing any appreciable disturbance. From this preliminary work the amounts referred to above have been found easily tolerated and without any appreciable disturbance, by rabbits of an average weight between three and four pounds.

In estimating the effects following the injections, I have taken into consideration the reaction of the rabbits to the external stimuli, as noise, petting or displacing them in their cages; their activity, as looking for food or water, moving around, jumping or lying down in complete prostration and not responding to

any stimulus; or remaining quietly in a corner but quickly responding to any external stimulus.

The first group injected with luminal only has been as I have already referred to above, the control group, with which all the other groups have been compared. So, if conventionally, we suppose the stuporous effects obtained with this group as a standard, in the consideration of the other groups we may use such signs as + or —, to mean the aggravation or the diminuation of the effects registered after the injections, in comparison with the control.

From the table, which show the outline of the work as well as the idea by which it was inspired, two groups are more interesting to note. The second group, injected with luminal adrenalin, showed marked hypnosis, almost near to a comatose state. All of the animals in this group died at different intervals during the period of injections and the autopsies revealed, beside the findings in the lungs, a markedly cirrhotic liver, with liver cells showing fat degeneration. No atheromatous lesions of the aorta were noted in any instance. The

fifth group, injected with luminal and ergotamine, showed a very opposite picture. The animals were lively after the injections, which seemed apparently not to affect them at all. The animals were killed at various intervals in order to note the progress of the lesions and it was surprising to remark the absence of important lesions. The liver, apart from a congestive state, microscopically, showed very few degenerated cells. Such findings must be compared with what has been stated above about the antithetic action of the adrenalin and ergotamine.

It is concluded also from the tables that the hypnosis is more marked in case of excitation of the sympathetic, with absolute sympaticotonia, (action of adrenalin and calcium) milder in case of excitation of the parasympathetic with absolute vagotonia. In the second case must be considered the fact that the action is an indirect one, due to the fact that an absolute vagotonia brings on more or less of a certain degree of hyposympaticotonia. When we inject a substance like ergotamine, which is directly inhibiting the sympathetic, and gives

TABLE III
Injections Every Other Day

Days	Luminal-Calcium	Luminal-Potassium	Luminal-Trypan Blue			
1	Stupor	1 Death	Like the Controls			
3	Deep Stupor	More Lively	Like the Controls			
5	Deep Stupor	More Lively	Like the Controls			
7	Deep Stupor	1 Death	Like the Controls			
9	Miosis	1 Death	Like the Controls			
11	Miosis	Excited	Like the Controls			
15	1 Death	Excited	Like the Controls			
19	Grave	. 1 Death	Like the Controls			
23	Grave	Excited	Better Than the Controls			
27	1 Death	1 Death	Better Than the Controls			
29	Grave	Excited	Better Than the Controls			
33	Grave	Excited	1 Death			
35	Grave	Excited	Like the Controls			
39	Grave	Excited	Better Than the Controls			
No changes of reaction until the 57th day.						
57	Grave	Excited	Worse Than Control			
No changes of reaction	No changes of reaction until the last day.					
70	All animals are killed and	their organs examined.				

only indirectly a relative vagotonia, the hypnosis is very light and less marked than in the cases in which an absolute vagotonia is experimentally obtained.

The injection of potassium has proved fatal several times till a minimum dose was found to be tolerated without inconvenience by the animals. The death occurred immediately after or during the injection with heart symptoms (heart in systole) and myosis of the pupils. The injection of calcium has given rise to extensive dermatitis and eczema of the ears, demonstrating once more the relation that some authors hold between calcium and many of the skin lesions. Some of the animals had such extensive lesions of the skin of the ear that the administration of the calcium by the marginal veins was absolutely impossible. It is important to note that in all the animals under experiment lesions of the skin were observed in the calcium group exclusively. The animals injected vitally with trypan blue, in order to provoke a blockage of the reticulo-histiocytic system, showed some peculiar behavior which is not without importance. The influence and the relation of the reticulo-endothelial system to the general metabolism is a newly

opened field of study and such extensive literature on the subject has been accumulated that I would not enter here into any discussion which would take us far from my purposes.

In my work I have limited my attention to studying the influence of an hypnotic over the system and the conclusions deducted are still, in my opinion, subject to further study and control. The animals at the beginning of the experiments showed a milder hypnosis, which gradually in the course of the injections became more marked and was accompanied by a state of stupor lasting longer than in the control animals. It is probable that at first the reticuloendothelium had been stimulated to overfunction by the injections and then, as the amount of stored dye increased, gradually became blocked and unable to perform possible catabolic functions. The drug, which was at first neutralized more promptly and eliminated consequently would remain a longer time in the organism and give a more pronounced hypnosis. On the other hand, although it is not my intention here to bring new contributions to the anatomy and physiology of the reticulo-endothelial system, I would point out that the character of dye-storing elements assigned by

TABLE IV
Injections Every Other Day

Days	Bulbocapnin	BulbChol.	BulbLithCarm.	BulbAdr.	Bulb-Erg.	BulbHist
1	Stupor	Rigidity	Reaction	Tremor	Uncertain	Anaphilactoid Reaction
3	Catatonia	1 Death	Quiet Moderate Stupor	Tremor, Pro- nounced Cata- tonia	Uncertain	Anaphilactoid Reaction
5	Catatonia	Scialorrhea Convulsions	Quiet Moderate Stupor	Tremor, Pro- nounced Cata- tonia	Uncertain	Anaphilactoid Reaction
7	Catatonia	Scialorrhea Convulsions	Quiet Moderate Stupor	Tremor, Pro- nounced Cata- tonia	No Stupor No Rigidity	Anaphilactoid Reaction
9	Catatonia	1 Death	Quiet Moderate Stupor	Worse	Almost Normal	Anaphilactoid Reaction
No changes	from the above.					
17	Catatonia	1 Death	Quiet Moderate Stupor	Worse	Almost Normal	Anaphilactoid Reaction
19	Catatonia	1 Death	Quiet Moderate Stupor	Worse	Almost Normal	Less Intense
21	Catatonia	1 Animal Alive	Quiet Moderate Stupor	Worse	Almost Normal	Less Intense
Same as above until the 59th day, with the exceptions noted below on 27th day.						
27	The Reactions Are Attenuating			The Tremor Attenuated Per- sistent Catatonia		
The animals	are killed the 60	th day.				

7	CABLE	V	
Injections	Every	Other	Day

Days	SodAmytal	AmytChol.	AmytLith.Carm.	AmAdr.	AmErgot.	AmHist.
1	Stupor	Tremor	Stupor	Depressed	Quiet	Anaphilactoid Reaction
3	Stupor	Tremor	Stupor	Depressed	Reaction	Attenuated
5	Stupor	Excitable	Moderate	Worse	Reaction	Attenuated
7	Stupor	1 Death	Moderate	Worse	Reaction	Attenuated
11	Stupor	Convulsions	Moderate	1 Death	Reaction	Attenuated
13	Stupor	Excitable	Moderate	Grave	Reaction	Attenuated
No change	es of reactions until	the 19th day.				
19	Stupor	Excitable	Moderate	1 Death	Reaction	Attenuated
No changes of reaction until the 39th day.						
40	All the anima	als are killed an	d their organs exami	ned.		

the authors is an unreliable criterion for distinguishing such cellular groups from other mesenchymal cells.

Del Rio Hortega, studying the histology of the elements of the nervous systems reached the conclusion that microglia is a mesenchymal derivate and in all the nervous lesions it behaves like any other reticulo-histocytic group in other organic districts. Although some authors have reported that through some artifices they have been able to stain vitally the microglia cells, in my experiments, I have been unable to obtain any vital staining of such elements. On the other hand, I am convinced that in all the pathologic processes, these cells behave like true mesenchymal elements and that it would be difficult to assign to them a character different from that of common histiocytes.

It is up to further researches to determine whether more essential characters must be looked for on a physiologic ground, to recognize such elements and neutralize experimentally their action on the general metabolism.

#### SECOND SERIES

In a second series of experiments bulbocapnin Merck was used instead of luminal. In recent years, the bulbocapnin has been used in experimental researches to produce catatonia in man and animals. The catatonic action is really pronounced and the results are always constant. Five groups of rabbits were subjected to experiment; the convenient dose necessary to reproduce the catatonia in rabbits by intravenous administration is two centigrams diluted in two cubic centimeters of water.

The first group, as control, received only bulbocapnin.

The second group received bulocapnin plus .005 of a gram of acetylcholine.

The third group received bulbocapnin plus five cmc, of 2.50 per cent solution of lithium carmine.

The fourth group received the bulbocapnin plus one ccm of 1:10000 adrenalin.

The fifth group received bulbocapnin plus .2 ccm, of ernutin solution (ergotamine).

The sixth group received bulbocapnin plus .5 cc. of 1:5000 histamine.

The observations made in this group are also very interesting. The control group, which was treated only with bulbocapnin, showed a typical stuperous attitude, with catatonic manifestations, without irritation or fearfulness. The time passed in stupor varied somewhat at the various injections, from a half hour to one hour, but the effects were always more or less evident in the progress of the experiments. The second group, treated with bulbocapninacetylcholine, showed various aspects. At the beginning of the experiments, some animals died, due to an excess of acetylcholine, of epileptoid convulsions, followed by rigidity of the neck and possible asphyctic phenomena, but when the dose of the drug was decreased (not sufficiently to give any toxic symptoms), the animals showed only slight tremor, scialorrhea and labile catatonic actions, followed almost immediately by a state of transitory hyperexcitability and remission. However, in this group, the animals could not acquire a habit to the drugs and at the eighth injection

many of them had been lost with clonic convulsions of short duration.

The third group, receiving bulbocapnin-lithium carmine, showed no particular signs. I noted, it is true, a better tolerance to the drug than in the controls, in that the stupor was very light without a definite catatonic action, but I do not wish from that to deduct any conclusion. For this group, I like to refer to what has been told about the group treated with luminal-trypan blue.

The fourth group that received bulbocapninadrenalin represents also in this series the most interesting group. The more important manifestations, following the administration of the drugs, were, tremor of the facial muscles, contracted eyelids, very short hypercinesia, followed by hypocinesia, rigidity of the muscles of the trunk and extremities, passive positions held for very long time without an apparent discomfort, sometimes contraction of the anterior extremeties and effort to hold all the weight of the body on the posterior extremities as trying the type of human deambulation, lack of expression or fear of the animal, lying indifferent to surroundings and keeping all the passive positions. At the end of the more striking manifestations, the animals were in a catatonic state for various hours or until the next morning.

The fifth group, which received bulbocapnin-ergotamine, at the first three injections, showed uncertain manifestations, which varied according to the animal (stupor in some, excitation in others, lack of reaction in others). In the course of injections, the effects became more constant and uniform. This group is interesting for the complete absence of reactive manifestations.

The sixth group which received bulbocapnin-histamine, showed an anaphylactoid reaction, which became attenuated during the course of injections but persisted always. After remission of the anaphylactoid manifestation, last ing about ten or fifteen minutes, the animals appeared normal, were looking for food, showed the usual fears of the human presence and did not keep any passive positions.

#### THIRD SERIES

In a third series of experiments, we used sodium amytal by intravenous method. The dose was two centigrams and the animals were distributed in groups, just in the same way as for the bulbocapnin. The doses of the drugs associated with the sodium amytal were exactly

the same already referred about the second series.

I do not want to repeat what I have been already telling about the experiments with luminal. In this series, as in the others, the addition of adrenalin has aggravated the manifestations, as the addition of ergotamine has attenuated them. I will not discuss here the manifestations due to the acetylcholine and histamine, which, notwithstanding their great importance, are out of the limits of this paper and belong to a more ample chapter of general biology, altho I am actually studying this problem and hope to consider it in a separate paper. In the same way I leave without further comment the findings of the groups treated with bulbocapnin-lithium carmine and sodium amytal-lithium carmine for various reasons. In the interpretation of the results, it is clear that they have not been always uniform and beyond doubt. A conclusion on this subject must be based on preconceptions, and arbitrary knowledge of a system, which still is a field of study and controversy.

The same above controversial points, will apply to the groups treated with bulbocapnin-lithium carmine and sodium amytal-lithium carmine, as the action of the dyes is identical and exercised on the same system.

#### CONCLUSIONS

In these three series of experiments, there has been a number of various manifestations, from which definite conclusions can be drawn. In concluding, I would like to point out what appears evident from the experiments I have been carrying out:

1—A certain influence is exercised by hypnosis on the sympathetic nervous system According to the state of hyper or hyposympaticotonia, the hypnosis can be more or less marked. Much of the tolerance or lack of tolerance of the individuals to the hypnotic drugs is, in my opinion, due to the condition of the autonomous nervous system at the moment of their administration.

2—In preceding publications of work carried on in dementia praecox, I pointed out some similarity between the experimental picture produced in the rabbits by the administration of luminal and dementia praecox and stated that the individuals affected with such disease presented a picture of sympaticotonia. Without intending to bring into the interpretation of human disease, the results of my experiments on rabbits, it is noteworthy to consider that it

is exactly the excitation of the sympathetic (hypersympaticotonia) which brings the more

marked stuporous effects.

3—A third practical point was brought out, because of the association of the drugs in human therapeutics. The general belief is that adrenalin, in association principally with local and spinal anaesthetics, has only a vasoconstrictive action, while in my opinion, a larger general action may be attributed to it in the establishment of anaesthesia. Another example may be offered in the case of calcium. When a tonsillectomy is in prospect and a calcium therapy is instituted in individuals, with increased clotting time, the administration of a small dose of sodium amytal or other hypnotic produces occasionally such marked effects, that the hypnosis almost conforms with a complete anaesthesia. Such effects are more or less attributed to the fact of a blood dyscrasia, or weakness on the part of the patient, or little tolerance to drugs. A careful consideration of the conditions of the neurovegetative system, particularly when administering drugs directly or indirectly acting on its functions, could bring about a better understanding of many curious phenomena of tolerance or intolerance frequently observed in human pathology.

Such a chapter has been only recently opened to research and already is full of promise of brilliant results. The future will certainly add more interesting findings to our present know-

ledge.

#### SUMMARY

The influence of the sympathetic, parasympathetic and reticulo-endothelial systems on experimental hypnosis and catatonia.

The author has experimented the action of luminal, bulbocapnin, and sodium amytal on rabbits, associated with some drugs whose action is specific on the neuro-vegetative and reticulo-endothelial systems. The hypnotic and catatonic effects have been more marked in the case of association with drugs stimulating the sympathetic (adrenalin-calcium), more attenuated in the case of association with drugs inhibiting the sympathetic. As to the action of the blockage of the R.E.S. on hypnosis, the effects are still uncertain and do not lend ground for definite conclusions.

This work was carried out, while the author was in charge of the laboratory at Topeka State Hospital. Thanks go to the Super-intendent of that institution, Dr. M. L. Perry, for his courtesy and assistance.

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#### SURGICAL DRAINAGE OF ACUTE SALPINGITIS WITH SUBSEQUENT PREGNANCY

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After a diagnosis of acute appendicitis has been made, every surgeon is occasionally embarrassed by discovering acute salpingitis instead. Since the abdomen has been opened, a decision is usually made to remove the tubes. Such a decision is certainly justified by the smooth convalescence that such patients commonly enjoy. The following case positively demonstrated, however, that such acutely inflamed tubes need not always be removed. With adequate drainage, forced administration of fluids, and prolonged rest in bed, clinical signs of salpingitis or tubo-ovarian abscess did not develop and pregnancy subsequently occurred.

#### REPORT OF CASE

A single girl, aged 18, was first seen August 8, 1936. Twenty-four hours previously, she had begun to have cramps over her entire abdomen. As these gradually diminished, pain and tenderness began in the right lower abdomen and she vomited several times. Her temperature was 102.6 F. Vaginal examination was normal except for tenderness on the right. She vigorously denied the possibility of a pelvic infection. The leukocyte count was 28,000, with ninety-two per cent polymorphonuclears.

At operation the viscera of the pelvis and lower abdomen were coated with a creamy yellow exudate. Pus dripped from the fimbriae of the fallopian tubes. Since the tubes were free from adhesions or other evidence of previous infection, it was decided not to remove them. Cigarette drains were carefully placed

(Continued on page 484)

#### PRESIDENT'S PAGE

To the Members of The Kansas Medical Society:

My letter of this issue is directed more especially to the young men of the society. To you men who have been occupied intensively for the past several years with your medical school and interne activities, and who are now concerned with the investment of your idle time. These idle, waiting hours should be used for intellectual and practical improvement.

One worthwhile plan is this: Imagine that you have been invited to present a paper before your county medical society; select an appropriate subject and prepare the very best paper possible; finish it completely, typewrite it, then file it away until needed. Imagine again that you have been asked to prepare a paper before some district society. Select an interesting subject, and after thorough reading and research prepare a complete paper and file it away.

If you have time to complete six to a dozen papers of this type during the first few years of your practice you will appreciate later the value of this study and mental training. And the time may come when you will want to use these papers. Then you will be impressed with the completeness and quality of your efforts.

Several weeks ago a new busy practitioner stopped me in the hospital corridor and asked me if I remembered my advice to him when he had first located in this vicinity. Upon my denial he said that I had given him the above advice, and that he had followed it and prepared ten papers. He had used all but one or two of the papers before various audiences and had found the plan very valuable.

Idle time is wasted time and continued directionless reading and review is tiresome, so I hope the above idea may help some of you to interestingly bridge the gap between the busy internship and the cares of an established practice.

J. F. Gsell, M.D., President.

#### **EDITORIAL**

#### HOSPITAL CARE INSURANCE

The address of C. Rufus Rorem, Director of the Committee on Hospital Service of the American Hospital Association, at the recent Clinical Congress of the American College of Surgeons, is of great interest to our profession since he discusses the influence of hospital care insurance on medical and hospital service. Recent statistics show that more than a million and a quarter persons are paying a few cents a day in order to budget hospital bills through some "group hospitalization" set-up. The American Hospital Association has established seven criteria which should be followed to make a plan acceptable. These are as follows:

- 1. Emphasis on public welfare.
- 2. Non-profit sponsorship and control.
- 3. Limitation to hospital service.
- 4. Free choice of hospital.
- 5. Support by medical profession and public..
  - 6. Economic and actuarial soundness.
  - 7. Dignified promotion and administration.

Four years have elapsed since these standards were promulgated and there are now thirty-five active non-profit free choice hospital service associations with more than 1,200,000 subscribers. No association of the above mentioned type has been discontinued or has failed to meet is financial obligations. However, many plans originated by private promoters or single hospitals have failed during the same period.

Since fifty thousand persons have already received care under non-profit hospital service plans and ten thousand subscribers are being admitted each month, an effort was made to ascertain the effect of this type of insurance upon hospital service and the medical service rendered by the doctors in attendance.

Mr. Rorem states that the survey indicates that the personal relationship between the physician and patient is not disturbed, although physicians not connected with hospital.

staffs complain of losing patients. In regard to the patients' attitude and recovery there is a divergence of opinion, some doctors stating that the patients stay in the hospital longer than necessary and abuse the plan and malingerers are encountered. However, Dr. Alton Ochsner, of Tulane University, believes the plan of great benefit to the medical profession and also that patients not only enter the hospital more readily but can stay sufficiently long for complete convalescence.

The quality of medical and hospital service has in general been satisfactory, although there is complaint of some hospitals not giving the same quality service to the subscribers as to full pay patients.

This survey also included an investigation of the amount and payment of physicians' fees. Numerous replies are cited which tend to show that the majority of physicians and surgeons treating subscribers are satisfied with their fees and many state that the bills are met more promptly than before.

Mr. Rorem states that—"There is very little probability that hospital service plans now organized will be expanded to include medical and surgical fees. If medical and surgical services are to be provided through group payment plans, such action must come through the initiative and cooperation of physicians and surgeons. Health insurance is not a probable outgrowth of hospital care insurance."

Hospital service prepayment plans will doubtless continue to grow for some time and their operation should prove a subject of great interest to our profession.

#### THE COMMITTEE OF PHYSICIANS

An editorial published in The Journal of the American Medical Association of August sixteenth, relates that some time after the appearance of The American Foundation Studies in Government report on American Medicine a conference of physicians was held in New York City, and later some of those present at the conference met with Mrs. Roosevelt and later with the President of the United State.

At the Atlantic City meeting of the American Medical Association a resolution was presented from the New York State Medical Society. The proposals contained in New York State Society resolutions were obviously a slightly modified form of the American Foundation proposals. The resolution was referred to a reference committee where it was discussed in numerous hearings. It was finally decided that the resolution should not be adopted, and so was disposed of for the time. But the substance of the resolution has come up again, sponsored by an organization under the name of The Committee of Physicians, headed by Dr. Russell L. Cecil, of New York, as chairman and Dr. John P. Peters, of Yale, as secretary, together with a list of endorsing names including 430 prominent physicians and surgeons over the country.

Under the news release date of November seventh, The Committee of Physicians has issued a bulletin setting forth the origin and purpose of this committee and stating the principles and proposals subscribed to, with a list of the signers. The bulletin is reprinted elsewhere in this issue of The Journal.*

The first principle as stated in The Committee of Physicians' bulletin is, "That the health of the people is a direct concern of Government." That is a good social concept but interpretation of the principle by politicians would not likely follow the social ideals inherent in the medical profession.

The second principle is "That a National Public Health policy directed toward all groups of the population should be formulated." If this means a federally organized and coordinated program incorporating in its scope all of the health activities involved in medical service, education and research, this principle will be challenged by many physicians who believe that such radical change is unnecessary.

What organized medicine can do is to face the issue and decide upon a course of action in keeping with social change. The pressure may emanate from a political group but the answer must come from organized medicine.

Political expediency should not enter into the decision as to the course to be followed. Medicine's answer to this principle will require the thought of the best minds in medicine together with expert social planning.

The third principle, "That the problem of economic need and the problem of adequate medical care are not identical and may require different approaches for their solution." It is evident that they are separate problems. Adequate medical care is less a problem than in the past, to those who will accept it. Medical service is improving and medical organization has made marked progress in recent years. The facilities for good medical care are widespread. Training in the specialties of medicine and surgery is improving rapidly. The public has an increasing faith in medicine. The economic value of both preventive and curative medicine has never before enjoyed such wide social recognition. Therefore the problem of economic need is more urgent.

The fourth principle, "That in the provision of adequate medical care for the population four agencies are concerned, voluntary agencies, local, state and federal Government." This principle as stated tends to confusion. It suggests a system without defining the scope and limitation of any of these agencies. Would both private and governmental agencies have the same purpose? This statement requires clarification and definite interpretation.

The statement of principles is followed by nine proposals. Many questions come to mind as they are read. For example, the third proposal states. "That public funds should be made available for the support of medical education and for studies, investigation and procedures for raising the standard of medical practice. If this is not provided for, the provision of adequate medical care may prove impossible." This means that private endowment failing to materialize, government money is necessary to carry on medical education and research. If government subsidy is used in this way will

^{*}See page 494.

not the government agencies dominate medical education and research? It may not in a "good" government, endeavoring to carry on in the way of democracy, but in case of an increasing centralization of power there are grave dangers to be thought of which might eventually seriously effect education, intellectual development and incentive.

The fifth proposal, "That public funds should be made available to hospitals that render service to the medically indigent, and for laboratory, diagnostic and consultive services."

This, if carried out would make it possible for every voluntary hospital to operate a free out-patients' clinic and receive government pay for all charity work. Would it not tend to place hospitals in the practice of medicine? It should be considered that such proposals call for large sums of public money if given nation wide application. Let it be remembered that public money, like private money, can run out. When the medical profession asks for public funds such requirements should be planned for with the utmost economy, for the time will come when public expenditure must be guarded even by politicians.

The subscribers to the statement of The Committee of Physicians, without exception are outstanding physicians and surgeons, many of whom occupy positions of leadership in their special fields of medicine. However many physicians believe that the movement which The Committee of Physicians sponsor can be traced to an origin in high political sources. Whatever the origin, whatever the source of inspiration, the issues brought forward in these principles and proposals should serve the purpose of bringing into focus the basic difficulties that are involved in the application of medical service, education and research. As yet no statement has appeared with sufficient explanation to make clear the full intention and scope of the principles and proposals that have been set forth.

The medical profession of Kansas contains many liberals, as well as conservatives who

want to know about these issues so that they may be discussed.

The medical profession is the guardian of health and it is its responsibility to seek and to find the right plans for the provision of medical care for the sick. Social changes are taking place and organized medicine does not hope to escape unaffected. A study of these changes, and informed, intelligent discussion of the problems involved by the rank and file of the profession is vital to organized medicine.

#### SULFANILAMIDE

Reports to date indicate that sixty-nine persons have lost their lives through the use of an improperly tested sulfanilamide preparation. The reports also indicate that few physicians were using the preparation and that most of the fatalities may be attributed to counter prescription of the remedy.

The lay press has reported the catastrophe throughout the country and it is possible that this may assist in averting future happenings of this kind. An able statement in this direction is the following editorial which appeared in the Kansas City Star under date of October 26:

#### A REMARKABLE DRUG AND A BLUNDER

In the last year the remarkable drug sulfanilamide was hailed as one of the outstanding medical discoveries of a generation. The list of its uses still is incomplete; but the possibilities have amazed the medical profession. There is no apparent reason why the profession should revise, that original opinion.

From the outset the acclaim was accompanied with warnings. Sulfanilamide was and is a dangerous drug. As it became a sensation the danger increased. It was inevitable that in the rush it should fall into inexpert hands, this in spite of the warnings of the doctors.

Now, it is involved in a tragic blunder, One preparation of sulfanilamide, with an apparently harmless elixir, has turned out to be a fatal poison. Although it was prepared in this form by only one drug house, it was widely distributed through the South and middle West. So far, nearly fifty deaths have been reported. Dr. Morris Fishbein, spokesman for the medical profession, has indicated that it is the most far-reaching blunder of its kind known to American medicine.

Once the cause of deaths was fixed, the federal food and drug administration and health departments throughout the country acted vigorously, with the result that sales rapidly were checked. All known bottles of the drug in Kansas City were confiscated by the health department last Thursday and a warning was issued here two weeks ago. But the country has witnessed the effect of failure to appraise a new drug preparation. An explanation is imperative.

It now appears that the poisonous quality of the preparation may not have been discoverable by laboratory methods. Also, part of the trouble may be with the methods of administering the drug. It must be assumed in the absence of other information, that a sample of the preparation was sent to the food and drug department as the law requires and that it was given the proper attention. Whatever the difficulties in such instances, it is apparent that any new preparations containing one ingredient known to be dangerous should not be distributed until its effect is known by nonhuman tests.

An unnecessary mistake has caused the sensational sulfanilamide to be linked with tragedy; but its potential benefits for the human race remain.

This tragedy, we think, contains several important morals. To physicians: That this should emphasize clearly the fact that many pharmaceutical suppliers do not adequately test the possible effects of their products and that therefore no patient should be subjected to the risk of any preparation which does not bear the approval of the Council of Pharmacy and Chemistry of the American Medical Association. To druggists: That they are not equipped to engage in the practice of medicine through the route of counter prescription and that they often bring detriment to customers directly or indirectly when they attempt to do so. To government: That this is dramatic proof of the need for state and federal pure food and drug laws which will protect rather than mislead the public. To patients: That drugs of all kinds are potentially dangerous unless used under the advice and direction of a capable physician.

#### LABORATORY

Edited by J. L. Lattimore, M.D.

THE VALUE OF URINE CULTURES IN THE DIAGNOSIS OF RENAL TUBERCULOSIS

C. A. HELLWIG, M.D.

Wichita, Kansas

Until recently, the routine methods for determining the tuberculous nature of a renal infection were (1) the staining of the sediment from ureter or bladder urine and (2) the injection of the urine sediment into guinea pigs. The superiority of the second method is generally recognized. According to De Carvalho from 1 to 10 tubercle bacilli are necessary to obtain a positive result by guinea pig inoculation, while smears for tubercle bacilli are positive only if the specimen contains 100,000 bacilli (Corper).

Since 1924, when Loewenstein showed that contamination by other organisms can be eliminated, a third method of bacteriological diagnosis has been accepted by the clinical laboratory, namely the culture of urine sediment on special media. Loewenstein and Holm recommended the addition of sulphuric acid to the sediment in a concentration which would destroy non-acid fast bacteria, but would not kill tubercle bacilli.

The principal advantages of the culture method over the animal inoculation are the following: (1) the culture method is inexpensive and easy to handle; (2) it excludes the possibility of death of the guinea pig from intercurrent non-tuberculous infections or spontaneous tuberculosis; (3) the culture method gives more rapid results. In the average, after twelve to fourteen days, visible colonies may be expected in positive cases. It is not always necessary to wait, until colonies are visible on the inoculated medium. As early as the fifth day after inoculation of the medium, a positive diagnosis may be sometimes made by scraping the surface of the medium and making a smear from it. Certain strains of the bovine type, on the other hand, grow very slowly and may require forty days to show visible colonies. If no growth has taken place at the end of ninety days, the culture is to be reported as negative.

To avoid errors with the culture method, the following precautions are recommended. Fresh medium should be prepared every ten days. We find as most satisfactory the Herrold eggagar medium. The yolk of one egg is mixed with 200 c.c. of  $1\frac{1}{2}$  per cent stock agar at 60 C. The tubes should be kept in the incubator for two days before being inoculated, to assure sterility of the medium. All work should be carried out in a closed room, so as to avoid contamination with acid fast saprophytes present in dust. There are two groups of acid fast saprophytes which may be confused with tubercle bacilli. One is found in dust, vegetables and the water of faucets. The other is present in blood from warm-blooded animals, sputum, urine, and human blood. The latter group develops only in glycerin mediums at incubator temperature and can therefore be excluded by the use of Herrold medium.

Another acid fast bacillus which might be mistaken for the tubercle bacillus is the smegma bacillus. Practically such confusion need not be considered when the sediment has been treated according to the Loewenstein-Hohn technique. After thirty minutes action of twelve per cent sulphuric acid on the urinary sediment, the smegma bacillus will not grow. In case of any doubt, guinea pig inoculation of the colony should be carried out.

The superiority of the culture over the smear method in suspected renal tuberculosis is generally admitted. Hohn found the culture positive in one hundred per cent of his cases of renal tuberculosis, the smear positive in only thirty-five per cent.

Relatively few studies are reported in which a comparison between the culture method and animal inoculation has been made. Most of the recent authors regard the urine culture as superior to guinea pig inoculation. In our experience, the culture was never negative when the animal inoculation was positive.

In spite of its great reliability, we would not recommend, in routine laboratory work, to replace the guinea pig inoculation by the culture method. In the interest of the patient, all three methods, smear, culture and guinea pig inoculation should be employed. Even if all three methods should fail to reveal tubercle bacilli, tuberculosis can not be excluded. There

may be, in renal tuberculosis, complete obstruction of the pelvic outlet for a long time and then suddenly many bacilli may escape. It is not uncommon to find many bacilli one day and none a few days later.

#### TUBERCULOSIS ABSTRACTS

A review for physicians prepared monthly by the National Tuberculosis Association and published through the co-operation of the Kansas Tuberculosis and Health Association and The Kansas Medical Society.

#### COOPERATION MUST CONTINUE

Thirty years ago nearly 200 people out of every 100,000 of our population were dying from tuberculosis. During these years three and one-half million men, women, and children have died from this preventable disease but had the mortality rate prevailed an additional two and one-half million would have died. Today the tuberculosis mortality rate is fifty-five per 100,000 in this country and there are



more than 500,000 people sick with tuberculosis.

The chief concern of the thousands of men and women working with the national, state and local tuberculosis associations is to find tuberculosis in its early stage when cure may be more easily effected. The greatest number of deaths occur between the ages fifteen and forty-five for which age group tuberculosis is still the leading cause of death. In spite of

the steady improvement of diagnostic methods only thirteen per cent of cases admitted to sanatoria are found to be in the early stages of the disease and this means there are far too many unrecognized cases in the community infecting their families and neighbors. Only by finding every single case can the disease be stamped out.



### Christmas Seals

are here again!

## They protect your home from Tuberculosis

Early examination, skillful diagnosis and prompt treatment are the factors which make the disease curable and preventable. Suspicious cases should be promptly examined, and examinations even where the disease is not suspected are important.

All this means that the cooperation given the campaign during these thirty years must be continued. The public has done its share generously in the past and now has another opportunity to continue its interest and help. Tuberculosis is everybody's problem for tuberculosis undiscovered endangers you. Let's help to bring it under complete control by buying Christmas Seals. Look for the double-barred cross on the seals you buy and use, the symbol of the world-wide fight against man's oldest disease enemy.—C. L. Newcomb, Director, Seal Sale, National Tuberculosis Association.

## SURGICAL DRAINAGE OF ACUTE SALPINGITIS WITH SUBSEQUENT PREGNANCY

(Continued from page 477)

between the ovary and the outer end of the tube on each side, extending into the cul-de-sac. The normal appendix was removed.

Following operation, fluids were administered under the skin and intravenously, so that the daily intake was at least 3000 cubic centimeters. The drains were not disturbed for

seven days; then they were gently loosened a little each day until they came out on the tenth day. She was kept in bed in the hospital for three weeks, and most of the time during the next three weeks at her home. At no time during her convalescence did she have pain in her abdomen, leukorrhea, palpable masses, or other signs of residual pelvic infection.

On February 23, 1937, she came for an examination because she had not menstruated for three months. All signs indicated a pregnancy of that duration. A Friedman test was positive. She then visited a practitioner who induced an abortion. The embryo could be identified and placental villi were seen in microscopic sections of the material subsequently expelled from her uterus.

#### **NEWS NOTES**

#### CULTS

First hearings on the cases to determine the rights of osteopaths to practice medicine and surgery were held on November 4.

In the Kansas Supreme Court case, State of Kansas vs. B. L. Gleason, Larned, the attorneys for the osteopaths filed two motions based upon legal formalities. The court stated that an early hearing would be granted on these motions. If the motions are denied, it is probable that the case will be tried before a special commissioner some time during the months of December or January.

In the case of State of Kansas vs. Gus V. Salley, Manhattan, the court stated that the matter would be taken under advisement pending the outcome of the Gleason case.

#### 1938 ANNUAL SESSION

The Sedgwick County Medical Society recently announced the following list of committee chairmen to aid in preparations for the 1938 annual session to be held in Wichita on May 9, 10, 11 and 12: Dr. F. J. McEwen, general chairman; Dr. D. L. Mills, treasurer; Dr. W. P. Callahan, arrangements; Dr. R. A. West, program; Dr. A. W. Fegtly, commercial exhibits; Dr. Geo. Gsell, publicity; Dr. H. E. Marshall, entertainment; Dr. E. J. Nodurfth, women's events; Dr. J. W. Shaw and Dr. L. A. Sutter, golf tournament, skeet shoot and banquet; Dr. J. D. Clark, greeters; and Dr. C. A. Hellwig, scientific exhibits.

A first meeting of the chairmen was held in Wichita on October 19 and preliminary plans were discussed at that time. Each committee was given an individual agenda listing the items it will be expected to accomplish and most all of the committees are already at work on their assignments.

An event of unusual interest in the preparation of plans was a meeting held by Sedgwick County Medical Society on September 8, wherein representatives from a considerable number of surrounding county medical soci-

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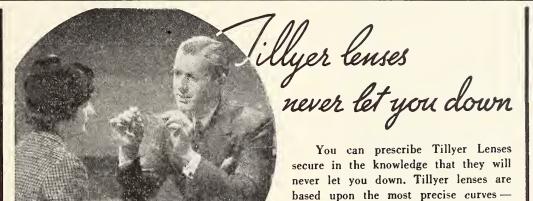
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mathematically compounded and so computed that both astigmatic and focal errors are brought below the point where they can be detected by the eye. Tillyer lenses have the property of giving the same effect as if the lens were rotated

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CRUM EPLER, M.D.
Superintendent

eties were invited to offer suggestions as to how the scientific program could be made more practical for all physicians. It was the thought of Sedgwick County Medical Society that this arrangement permitted the smaller counties, which cannot be hosts to a state meeting to nevertheless state their opinions as to how the meeting should be arranged. Many suggestions were received from this source and most all will be adopted.

The committee on scientific exhibits is particularly eager to have that portion of the meeting represent the entire state and Dr. C. A. Hellwig, St. Francis Hospital, Wichita, chairman of this committee, has requested that all members who would be interested in presenting an exhibit write to him in that regard.

#### APPOINTMENT

Dr. J. F. Gsell recently announced the appointment of Dr. A. E. Gardner. Wichita, as a member of the Necrology Committee, to fill the vacancy created by the death of Dr. C. M. Vermillion, Pratt.

#### REPORT

Dr. M. B. Miller, treasurer of the Shawnee County Medical Society, recently submitted the following report of the 1937 state meeting expenses to Dr. Geo. M. Gray, Treasurer:

#### RESOURCES

112000	11020	
Exhibits	\$1,457.00	
Advertising	104.00	
Other	133.78	
State Society (Advance		
appropriation)	500.00	
appropriation)		
	\$2,194.78	\$2,194.78
DISBURS	EMENTS	
Arrangements	\$ 952.32	
Speakers		
Entertainment		
Printing		
Other	84.35	
	01.55	
	\$1,981.24	\$1,981.24
	Ψ1,201.21	Ψ1,201.2Τ
Surplus		\$ 213.54
Y		1 - 1 - 1

Included in the report was a check from Shawnee County Medical Society in favor of the Society for \$213.54, which thereby represented a total cost to the Society of \$286.46 for the 1937 meeting. This amount established a record low cost, at least in recent years.

#### JOINT MEETING

The Kansas State Board of Medical Registration and Examination and the Kansas State Board of Pharmacy held a joint meeting in Lawrence on November 13.

Matters pertaining to medical and pharmaceutical problems were discussed.

#### STERILIZATION

The recent discussion in the lay press pertaining to sterilization of inmates of Kansas eleemosynary institutions calls to attention the following Kansas statute: "Except as authorized by this act (public institutions) every person who shall perform, encourage, assist in or otherwise promote the performance of either of the operations described in this act (vasectomy, and oophorectomy or salpingectomy), for the purpose of destroying the power to procreate the human species, unless the same shall be a medical necessity, shall be fined not less than \$100 nor more than five hundred (\$500) dollars, and imprisoned in the county jail not less than six months nor exceeding one year." (R. S. 76-155.)

The term "medical necessity" probably indicates that any physician contemplating an operation of this kind should be able to show therapeutic necessity beyond reasonable doubt.

#### COMMITTEES

The following is a report of recent committee meetings:

A meeting of the Auxiliary Committee was held in Kansas City, Missouri on October 5, 1937. Members present were Dr. E. J. Nodurfth, Chairman, Dr. L. B. Gloyne and Dr. C. Omer West. Clarence G. Munns was present as Executive Secretary.

Decision was made that a bulletin should be forwarded to the secretaries and president of the county medical societies and to the official representatives outlining the following: (1) Possibilities for assistance to county medical societies through active auxiliaries. (2) A suggested program which local auxiliaries can accomplish. (3) The fact that future bulletins will be sent outlining other suggested programs for auxiliaries. (4) A suggestion that counties which have auxiliaries urge these groups to install programs of this kind, and that those which do not have auxiliaries also commence similar programs with a view toward organizing auxiliaries if it is felt that assistance can be provided. (5) Information concerning the methods for organization of an auxiliary.

The central office was asked to obtain data concerning available exhibits which might be sponsored by the auxiliary and local groups at county fairs, state fairs, and other lay meetings of importance.

Instruction was given that the central office should issue upon approval of the chairman of the committee a recommended procedure for scheduling public health talks before local and state lay groups.

The central office was asked to prepare a report concerning possibilities for issuing to public libraries in the state an official release listing recommended medical and public health books for purchase. A suggestion was also made that local auxiliaries and local groups assist in having these books purchased.

The central office was asked to write a letter to the president of the auxiliary suggesting that the organization reserve space and complete arrangements for an auxiliary exhibit at the next state meeting of the Society.

Instruction was given that the Executive Secretary should write the president of the auxiliary a suggestion that the central office be established as an archive for auxiliary records, and that the auxiliary forward its minutes and records for installation of this service.

Adjournment followed.

* * *

A meeting of the Committee on School of Medicine was held at Kansas City, Missouri, on October 5, 1937.

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The members present were Drs. F. J. McEwen, Philip Morgan, L. R. McGill, J. A. Blount, A. R. Chambers, Fred E. Angle, L. B. Spake and H. L. Snyder. Clarence G. Munns was present as Executive Secretary.

Dr. McEwen outlined a suggested program for this committee as approved by the conference committee chairmen.

The first item for discussion was a question as to whether any possibility existed for moving the entire medical school to Kansas City, Kansas, and for making the present Kansas City course a complete four year medical course instead of the present method of two years at Lawrence and two years at Kansas City. Upon a motion by Dr. Morgan, seconded by Dr. McGill and carried, it was unanimously approved that a resolution suggesting a complete four year course at Kansas City should be prepared for consideration by the House of Delegates. Dr. Morgan was asked to prepare a resolution of this kind.

Possibilities for establishment of a diagnostic service at the University of Kansas School of Medicine were discussed, and Dr. Angle was requested to prepare a report on this for further discussion by the committee.

The central office was requested to compile information on the existence and kind of medical economic courses and art of medical practice courses in other medical schools. Dr. Blount was asked to receive this information and to make a report concerning same at the next meeting.

The central office was also asked to compile information on the type of postgraduate instruction afforded to physicians by other medical schools, and Dr. Chambers was asked to receive this information and to make a report concerning same at the next meeting.

Dr. McGill was asked to investigate the present facilities of Stormont Medical Library, and to make a report at the next meeting concerning possibilities for consolidation of this library with the library of the University of Kansas School of Medicine.

Preparation of pamphlets and talk outlines by medical students was discussed and tabled.

Following the above business the committee adjourned to the University of Kansas School of Medicine where it was the guest of Dr. H. R. Wahl for a thorough inspection of the facilities of the school. After this inspection a meeting was held with Dean Wahl to discuss possibilities wherein this committee can be of assistance to the school.

It was decided that the next meeting of the committee shall be held at Emporia on either December 5 or December 12.

Adjournment followed.

* * *

A meeting of the Committee on Control of Tuberculosis was held in Topeka on October 17. Members present were Dr. H. N. Tihen, Chairman. Dr. E. K. Musson, Dr. N. C. Nash, Dr. J. G. Hughbanks, Dr. C. F. Taylor, and Dr. C. H. Lerrigo. Visitors present were Dr. V. M. Auchard, Dr. H. L. Chambers, Dr. G. I. Thacher, Dr. N. P. Sherwood, Dr. H. L. Snyder, Dr. F. A. Trump, Dr. C. E. Coburn, Dr. J. L. Lattimore, Dr. O. W. Davidson, Dr. F. L. Loveland. Clarence G. Munns, was present as Executive Secretary.

Upon motion made by Dr. Taylor, seconded and carried, the minutes of the last meeting were approved.

Dr. Lerrigo submitted the following resolution on behalf of the Kansas Tuberculosis and Health Association, and was accepted by the committee: In reviewing the work of the Committe on Control of Tuberculosis with especial reference to the features assigned to the Kansas Tuberculosis and Health Association, I am asked by our Executive Board to state that the terms "Publicity and Financing" mentioned in paragraph 2 of Section I of the Agenda of meeting held September 6. 1937, should be changed to Health Education, Prevention and Rehabilitation. This is to get in line with the concept of our work now being stressed by the National and State Tuberculosis Associations.

We realize that the term "Health Education" admits of many interpretations. In our work we accept it as meaning any definite measures that impart information about ways of preventing tuberculosis and the facilities afforded in our state for the care and treatment of discovered cases. We would be quite willing to let the word "information" cover the ground were it not that an active interest in Health Education in schools has long been a major project of both National and State Tuberculosis Associations. In this connection it is proper to say that the Annual Meeting of our State Association held last Monday, October 11th at Kansas City, Kansas, adopted resolutions on this very subject which are summed up briefly as follows:

WHEREAS: The State Department of Education is now actively engaged in effecting an expanded and modern state-wide program of Health education in the rural schools of Kansas, which program is in keeping with the principles and practices of the aforesaid National and State Tuberculosis Associations in the prevention of tuberculosis.

BE IT RESOLVED: That the Kansas Tuberculosis and Health Association through its Executive Secretary offer its cooperation and such of its material support as conditions may warrant in helping to make the above program effective.

I am stressing this point as to Education or information in line with the pronouncement of the National Tuberculosis Association that "tuberculosis eradication now is a problem primarily of education, as science already possesses enough technical knowledge to control the disease."

Dr. Tihen reported that in accordance with the authorization of the committee he had written Governor Walter Huxman, Mr. E. A. Briles, Chairman of the House Ways and Means Committee, and the Board of Administration commending them for their assistance in extending facilities at Norton, and that he had received replies from each.

Dr. Tihen also reported that the Editorial Board had accepted the offer of the committee to assist in providing material for a section on tuberculosis in The Journal. Upon motion by Dr. Hughbanks, seconded and carried, it was agreed that each member of the committee would forward scientific papers on this subject to the chairman, and that he would forward them to the Editorial Board for publication when a sufficient number are received.

A suggested bulletin for forwarding to the county medical societies was presented to the committee. Upon motion by Dr. Lerrigo, seconded and carried, instruction was given that the central office shall issue the bulletin.

The following reports were given concerning the possibilities for presenting tuberculosis postgraduate programs: Dr. Lerrigo reported that his Association was interested in this matter, and requested that the committee



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provide him with a detailed financial estimate for presentation at the December meeting of the Board of Directors of his Association. Dr. Helm reported that he had not had an opportunity to discuss this matter with the Social Security Act officials, but that he would do so at the earliest opportunity. Decision was made that Dr. Tihen should appoint a committee to make recommendations concerning the tuberculosis postgraduate program, and that consideration should be given to the possibility of having the Kansas State Board of Health assist in a professional program and the Kansas Tuberculosis and Health Association assist in a lay educational program.

Dr. Taylor reported that he felt it would be possible to provide tuberculosis postgraduate courses at the Norton Sanatorium. Dr. Tihen asked Dr. Snyder, Chairman of the Norton Sanatorium Advisory Committee, to present this matter for discussion at the joint meeting of the Sanatorium Advisory Committee and the Board of Administration on November 11.

Reports were presented by Dr. Nash and Mr. Munns on behalf of Dr. Gench concerning the questionnaire information received on the subject of available pneumothorax and x-ray equipment in Kansas. Dr. Nash and Dr. Gench were asked to continue their studies in this regard.

Instruction was given that the central office shall issue a bulletin to the county medical societies advising them that the Norton Sanatorium will provide instruction on pneumothorax therapy to any interested physicians, and also describe possibilities for obtaining inexpensive pneumothorax equipment.

X-ray interpretation was discussed and tabled until a

later meeting.

Dr. Chambers and Dr. Lerrigo discussed plans for continuation of the Douglas County tuberculosis clinics, and agreement was made that the Douglas County Medical Society and the Kansas Tuberculosis and Health Association should hold further conferences in this regard.

Dr. Musson presented an oral report concerning the uniform procedure for tuberculin testing, and the request was made that a written procedure be presented at the next meeting for approval and release to the county medical societies.

Discussion of the adequacy of present sanatoria facilities was tabled until the next meeting.

A plan presented by Dr. Taylor for discovery of tuberculosis through known contacts with patients was also tabled until the next meeting.

Dr. Tihen outlined a suggested method for county tuberculosis clinics, which was tabled until the next meeting.

The following resolution presented on behalf of the Kansas Tuberculosis and Health Association by Dr. Coburn was accepted:

Important Features of Clinic Service.

From the point of view of preventing tuberculosis we believe the important features are (1) Measures that will weed out the old case that is the carrier of infection and (2) Finding the early case, even before clinical symptoms are present.

It is evident that such clinics do not demand the services of one who ranks as an expert in medical and surgical treatment. Recognition of this makes for economy in expense of clinics and gives opportunity for many who have no claim as experts to increase their knowledge. We do not have an exact record of clinics held in 1937 at present. Such record as we have indicates weekly diagnostic clinics held at Topeka, Kansas City and Wichita. A monthly clinic held at Lawrence, a bi-monthly clinic at Salina. Occasional clinics at Emporia, Arkansas City, McPherson, Newton, Lyons, Kingman, Garden City, Winfield, Eureka, ElDorado, Leavenworth, Abilene, Independence, Iola, Fort Scott, Hutchinson and the counties of Crawford, Morris, Clay and Phillips. Most of these clinics have been especially for diagnosis and case finding.

The Saline County Medical Society holds a tuberculosis clinic about every two months, but on no definite date. The clinicians are appointed by the medical society on a rotating plan which removes the objection that might give one physician especial prominence in the work. From a recent report of the chairman of the Saline County Tuberculosis and Health Association we learn that six clinics have been held since October, 1936, at which 237 patients were examined and given the intradermal test, forty-eight patients were given x-ray examination, and the x-rays for indigents are paid for at a special rate of \$2.50 from Christmas Seal funds.

What The Tuberculosis Association May Do In Regard To Clinics.

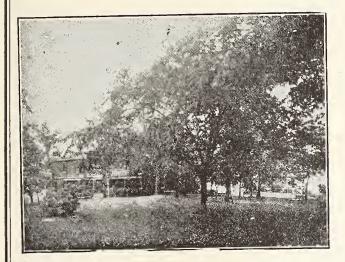
- 1. The preference of the Kansas Tuberculosis and Health Association is to do no clinic service excepting as it may be of financial and educational aid to the Division of Tuberculosis of the State Board of Health.
- 2. Some tuberculosis associations, especially those in the three large cities of our state, are paying all or part of the expense of clinic service. We expect such arrangements to be continued, provided that they do not include fees for service by full-time health officers.
- 3. Limited by their annual budgets the local tuberculosis associations are authorized to pay \$2.50 for x-ray films of positive reactors to the tuberculin test in the case of indigent persons. This applies especially in campaigns for skin testing of schools, but may apply also to any case in which the physician in charge considers an x-ray film desirable for diagnosis.
- 4. Tuberculosis associations may arrange through the state association to contribute a flat sum to county medical societies as a share of the expense of clinic service at which indigent persons receive examination even though the clinic be one for treatment or consultation at which fees are charged, but will not directly sponsor such clinics.

5. Tuberculosis associations will provide material for the intradermal test upon request, making arrangements through the Division of Tuberculosis of the Kansas State Board of Health.

The matter of clinic service has been considered in its various aspects by the Kansas Tuberculosis and Health Association since the last meeting of this committee. It was the general opinion of our people that we should stick closely to our avowed purpose of doing everything possible to stand thoroughly on its feet the work of the Division of Tuberculosis of the State Board of Health. especially since the establishment of this division was one of the objectives of our work for at least ten years prior to the time that it became effective.

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We have also faced the fact that in the present unsettled program of the Control of Tuberculosis it would be a wise step to allow our local and affiliated associations a great deal of latitude as to any measures of assistance that the tuberculosis association could render to the county medical society in the way of diagnostic clinic service such as we have attempted to give in years past. The matter resolved itself into the passage of two resolutions which were duly presented and passed at our annual meeting on Monday, October 11th. They are as follows:

BE IT RESOLVED: That the Kansas Tuberculosis and Health Association will continue its preventive clinic service in close affiliation with the Tuberculosis Division of the Kansas State Board of Health so long as said Board finds our assistance desirable and accepts such assistance as the Executive Board of this association authorizes; and

BE IT FURTHER RESOLVED: That although unable to give sponsorship to treatment clinics, consultation clinics, and particularly to any form of clinic in which fees are accepted, affiliated tuberculosis associations in Kansas may make a contribution from Christmas Seal Funds to such lines of service when approved and authorized by the Executive Board of the Kansas Tuberculosis and Health Association.

In reference to the "Tuberculosis Post Graduate Program" we shall be glad to see what can be worked out and include a reasonable sum in our 1937 budget. This would be strictly in line with the work of health education, for any advance in knowledge gained by the physician is of tenfold value in the work of prevention.

It was moved by Dr. Taylor, seconded and carried, that the committee endorse the 1937 Christmas Seal Campaign, and that it attempt to assist the Kansas Tuberculosis and Health Association in this regard in any way possible.

Adjournment followed with agreement that the next meeting of the committee shall be held either during the first half of December or the first half of January.

* * *

A meeting of the Committee on Hospital Survey was held in Newton on October 30. Members present were Dr. A. R. Hatcher, Dr. C. E. Joss, Dr. Marion Trueheart, Dr. Hinshaw. Mr. T. J. McGinty, Superintendent of the Southeast Missouri Hospital of Cape Girardeau, Missouri, and Reverend J. E. Lander, President of the Kansas Hospital Association were also present. Clarence G. Munns was present as Executive Secretary.

Decision was made that the central office shall prepare for issuance to the county medical societies a questionnaire showing the number, kind, and facilities of hospitals in Kansas.

Cult practice in recognized hospitals was discussed with decision that this should be further considered at the next meeting of the committee.

The central office was instructed to secure from the American Medical Association and the American Hospital Association information concerning the progress other states have made in the matter of hospital licensure.

Discussion followed concerning possibilities for combining the annual meeting of The Kansas Medical Society with the annual meeting of the Kansas Hospital Association. It was agreed that this matter should be referred

to the Executive Committee of the Kansas Hospital Association for its recommendation.

Decision was also made that the possibility of adding a hospital division to the central office of the Society should be referred to the Executive Committee of the Kansas Hospital Association for its recommendation.

Possibilities for assisting the Kansas State Nursing Association were discussed, and it was agreed that this matter shall be further considered at the next meeting of the committee.

Possibility of adding a hospital section to The Journal was discussed and referred to the Executive Committee of the Kansas Hospital Association for recommendation.

The central office was asked to assemble data on the practicability of lien laws as based on experience of other states.

The central office was asked to prepare a questionnaire on present hospital equipment and facilities in the state which could be forwarded to the county medical societies for completion by hospitals in their counties.

Adjournment followed.

* * *

A meeting of the Committee on Public Policy was held at the Hotel President in Kansas City, Missouri. on October 5, 1937. Members present were: Drs. E. C. Duncan, L. L. Bresette, Robert Sohlberg, W. F. Bernstorf, and R. W. VanDeventer. Dr. T. C. Kimble and Dr. R. T. Nichols were visitors. Clarence G. Munns was present as Executive Secretary. Discussion was had concerning future plans of this committee. Foremost action was approval of a plan wherein a series of district meetings would be held prior to March 1 for discussion of organization matters.

* * *

A meeting of the Committee on Control of Cancer was held in Topeka on November 3. Minutes of this meeting will be published in the next issue of The Journal.

The Committee on Border Line Groups is conducting a survey through the other state medical societies to determine questions pertaining to lay technicians, lay anesthetists and lay x-ray operators.

#### HOSPITAL MEETING

The Kansas Hospital Association held its annual meeting at Newton on October 30. Representatives of the Society who took part in the program are as follows: Dr. A. R. Hatcher, Wellington: Dr. H. H. Jones, Winfield; and Clarence G. Munns, Topeka.

#### WOMEN'S FIELD ARMY

Meetings of the Advisory Board and the Executive Committee of the Kansas Division, Women's Field Army, American Society for the Control of Cancer, were held in Topeka on November 3. A meeting of the Society Committee on Control of Cancer was held on the same day and the members of that committee attended both of the above meetings.

Matters of policy of the organization were discussed and plans were prepared for the next membership campaign which will be conducted during April, 1938.

The Women's Field Army is an organization composed of women who are interested in promoting lay



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education on cancer. Its foremost policy is to operate under the guidance and direction of the medical profession. Mrs. Donald Muir, of Anthony, is State Commander of the Kansas Division. District Vice Commanders are: Mrs. E. Lowell Solt, Waterville; Mrs. C. R. Verden, Kansas City; Mrs. R. H. Turner, Independence; Mrs. Carl Knouse, Emporia; Mrs. Guy E. Finkle, Canton; Mrs. Milton O. Nyberg, Wichita; Mrs. E. F. Goernandt, Clyde; Mrs. J. E. Johntz, Abilene; Mrs. J. C. McArthur, Brewster; Mrs. W. Y. Herrick, Wakeeney; Mrs. J. W. Cossell, Mullinville; and Mrs. Albert Miller, Dodge City. Members of the Advisory Board are: C. C. Nesselrode, M.D., Kansas City, Chairman; P. O. Herold, Anthony, Treasurer; Mrs. Glenn Dreisbach, Topeka, Secretary; Governor Walter A. Huxman; H. L. Snyder, M.D.; Mrs. Ada Montgomery; H. R. Ross, M.D.; J. F. Gsell. M.D.; Senator Arthur Capper; Mrs. W. A. White; Marion Trueheart, M.D.; Henry J. Allen; Mrs. C. W. Hunter; C. E. Rarick; L. G. Allen, M.D.; Miss Abbie Bellport; Philip C. King; W. A. White; C. Q. Chandler; Mrs. Ross A. Etter; Chas. H. Sessions; D. E. Ackers; Miss Helen Moore; F. R. Croson, M.D.; W. P. Waggener; James Hibbard, M.D.; Mrs. R. W. Urie; Rev. J. Merle Evans; H. S. Kilby; Fred M. Harris; Miss Elizabeth J. Agnew; N. E. Melencamp, M.D.; Mrs. Hattie Moore-Mitchell; Mrs. Cora G. Lewis; J. G. Missildine, M.D.; E. C. Mingenback; Mrs. Mary P. Van Zile; Thomas W. Butcher; M. B. Miller, M.D.; Mrs. Lillian Mitchner; Howard Snyder, M.D.; Mrs. Mary Bure; Chas. S. Huffman, M.D.; Mrs. Louis R. Fulton; W. A. Brandenburg; Miss Maude E. Minrow; J. Wesley Lucas, D.D.S.; Mrs. Chester Mendenhall; Mrs. Jessalyn Odell; H. R. Wahl, M.D.; Max Levand; and Miss M. Pearl Leighty.

#### THE COMMITTEE OF PHYSICIANS

The following is the bulletin released by The Committee of Physicians under date of November 7, which is referred to on page 479 of this issue:

#### COMMITTEE OF PHYSICIANS

RUSSELL L. CECIL, NEW YORK CITY, chairman; Associate attending physician, New York Hospital.
JOHN P. PETERS, NEW HAVEN, Secretary; Professor of medicine, Yale University School of Medicine.

MILTON C. WINTERNITZ, NEW HAVEN, Vice-chairman, Professor of pathology, formerly dean, Yale University School of Medicine.

HUGH CABOT, ROCHESTER, MINNESOTA, Vice-chairman; Consulting surgeon, Mayo Clinic.

GEORGE BLUMER, NEW HAVEN, Professor of clinical medicine, formerly dean, Yale University School of Medicine.

ALLAN M. BUTLER, BOSTON, Assistant professor of pediatrics, Harvard Medical School.

J. ROSSLYN EARP, ALBANY, Medical editor, Health Education Division, New York State Department of Health.

C HANNING FORTHINGHAM, BOSTON, Chief of the medical service, Faulkner Hospital.

WILLIAM S. McCANN, ROCHESTER, N. Y., Physician in chief, Strong Memorial and Rochester Municipal Hospitals.

GEORGE R. MINOT, BOSTON, Professor of medicine, Harvard Medical School; director, Thorndike Memorial Laboratory.

ROBERT B. OSGOOD, BOSTON, Professor emeritus of orthopedic surgery, Harvard Medical School.

RICHARD M. SMITH, BOSTON, Assistant professor of pediatrics and child hygiene, Harvard Medical School and School of Public Health.

JOHN H. STOKES, PHILADELPHIA, Professor of dermatology and syphilology, University of Pennsylvania School of Medicine.

SOMA WEISS, BOSTON, Associate professor of medicine, Harvard Medical School.

#### ORIGIN AND PURPOSE OF THE DRAFT

"A large number of medical men believe that the report of the American Foundation Studies in Government, entitled 'American Medicine: Expert Testimony Out of Court', deserves the thoughtful attention of all physicians.

"As a contribution to the discussion of the subject of medical care in the United States, this self-appointed group of medical men, finding themselves in agreement, has formulated certain principles and proposals anent such care. These physicians, who have been trying to purvey medical care for many years, speak only for themselves and not for the Foundation or for any other organization. They hope that these principles and proposals may suggest the lines along which effort may be made by voluntary, local, state and federal agencies to improve medical care.

"It is recognized that the medical profession is only one of several groups to which 'medical care' is of vital concern. Close cooperation between physicians, economists and sociologists is essential. Nevertheless the medical profession should initiate any proposed changes because physicians are the experts upon whom communities must depend. Unless the medical profession is ready to cooperate with these other groups they cannot expect to play successfully the part which they should play, nor can they expect to enlist the sympathetic understanding of legislative bodies.

"It seems to us probable that certain alterations in our present system of preventing illness and providing medical care may become necessary; indeed, certain changes have already occurred. Medical knowledge is increasing rapidly and is becoming more complex. Changes in economic and social conditions are taking place at home and abroad. Medicine must be mobile and not static if medical men are to act as the expert advisers of those who convert public opinion into action.

"The conviction is general that action should be taken only upon the basis of demonstrated need and as experience accumulates to indicate that such action is likely to attain its ends in a nation comprising forty-eight states in which climatic, economic and social conditions vary greatly.

"Comments on these principles and proposals are invited and should be sent to Dr. John P. Peters, Secretary, Committe of Physicians, 789 Howard Avenue, New Haven, Connecticut.

#### THE PRINCIPLES AND PROPOSALS

The principles and proposals signed by the 430 medical men and now presented to the medical organizations for consideration, are:

#### **PRINCIPLES**

- 1. That the health of the people is a direct concern of the government.
- 2. That a national public health policy directed toward all groups of the population should be formulated.
- 3. That the problem of economic need and the problem of providing adequate medical care are not identical and may require different approaches for their solution.
  - 4. That in the provision of adequate medical care for

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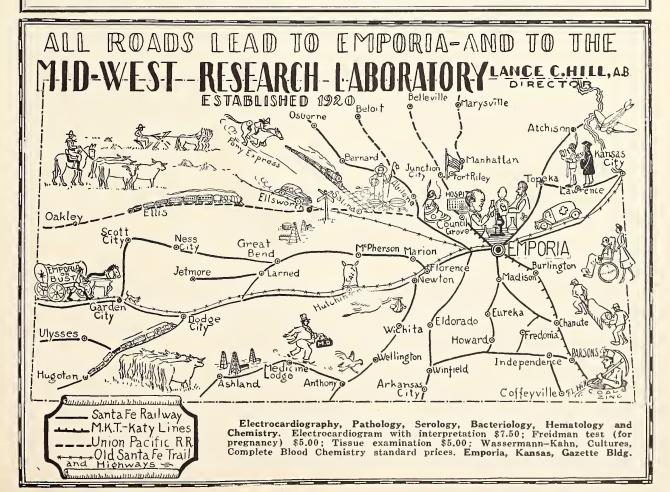
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the population four agencies are concerned: voluntary agencies, local, state and federal governments.

#### **PROPOSALS**

- 1. That the first necessary step toward the realization of the above principles is to minimize the risk of illness by prevention.
- 2. That an immediate problem is provision of adequate medical medical care for the medically indigent, the cost to be met from public funds (local and/or state and/or federal).
- 3. That public funds should be made available for the support of medical education and for studies, investigations and procedures for raising the standards of medical practice. If this is not provided for, the provision of adequate medical care may prove impossible.
- 4. That public funds should be available for medical research as essential for high standards of practice in both preventive and curative medicine.
- 5. That public funds should be made available to hospitals that render service to the medically indigent and for laboratory and diagnostic and consultative services.
- 6. That in allocation of public funds existing private institutions should be utilized to the largest possible extent and that they may receive support so long as their service is in consonance with the above principles.
- 7. That public health services, federal, state and local, should be extended by evolutionary process.
- 8. That the investigation and planning of the measures proposed and their ultimate direction should be assigned to experts.
- 9. That the adequate administration and supervision of the health functions of the government, as implied in the above proposals, necessitates in our opinion a functional consolidation of all federal health and medical activities, preferably under a separate department.

The subscribers to the above principles and proposals hold the view that health insurance alone does not offer a satisfactory solution on the basis of the principles and proposals enunciated above.

#### COUNTY SOCIETIES

A meeting of the Allen County Medical Society was held in Iola on October 20. Dr. J. L. Lattimore, Topeka, was the principal speaker.

The Anderson County Medical Society held a dinner meeting October 20 in Garnett. Speakers and their subjects were: Dr. Ralph E. White, Garnett—"Injection Treatment of Hernia", and Dr. Ray D. Fraker, Garnett—"The Use and Danger of Sulfanilamide".

Four honorary members of Brown County Medical Society: Drs. W. W. Nye, E. J. Leigh, George McKnight, all of Hiawatha, and H. J. Deaver, of Sabetha, were invited to be guests of honor at a dinner given by that society in Hiawatha on November 5. Dr. E. K. Lawrence, Hiawatha, presented a tribute to Dr. Nye, and Dr. Leigh and Dr. McKnight told of their early day experiences in medicine.

The quarterly meeting of the Central Kansas Medical Society was held in Ellsworth on September 30. The program included: Papers by Dr. E. S. Edgerton and Dr. F. L. Menehan, Wichita, whose subjects were "Injection Treatment of Hernia" and "Present Status of Preventive Pediatrics", respectively.

A symposium on syphilis was the feature of a meeting of the Coffey County Medical Society held in Burlington on October 21. Papers included were: "Mucous Patch"—Dr. McGinnis; "Chancre"—Dr. Adams, Burlington; "Early Syphilis"—Dr. Turner, LeRoy; "Late Syphilis"—Dr. Henry Benning, Waverly; and "Neuro-Syphilis"—Dr. A. B. McConnell, Burlington.

Dr. Howard Snyder, Winfield, was the speaker at a meeting of the Cowley County Medical Society in Arkansas City on October 21. He discussed "Treatment of Fractures of the Lower Extremities", and illustrated his presentation with pictures, both motion and stills.

The members of Miami and Douglas County Societies were guests at a meeting of Franklin County Medical Society held in Ottawa on September 29.

Leavenworth County Medical Society met in Leavenworth on November 8. Dr. J. L. Lattimore, Topeka, was the principal speaker.

A meeting of the Montgomery County Medical Society was held in Coffeyville on October 22. Papers were presented by Dr. J. H. Danglade and Dr. L. P. Engel, of Kansas City, Missouri.

Northwest Kansas Medical Society, in cooperation with the Hoxie Rotary Club, and the Kansas Crippled Children's Commission, sponsored a diagnostic clinic for crippled children at Hoxie on October 29. Dr. F. E. Coffey, Hays, conducted the clinic.

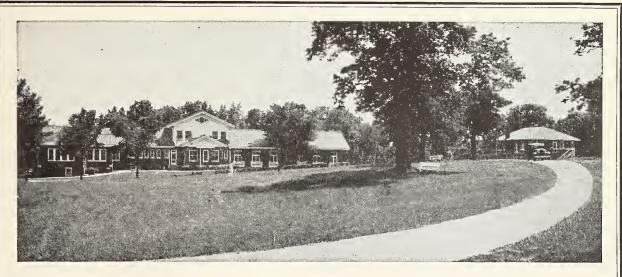
Dr. N. C. Nash. Wichita, presented a paper on "X-Ray Treatment of Certain Infections", and Dr. A. R. Hatcher, Wellington, discussed "Anemia Due to Malignancy in the Small Intestine", at a meeting of the Pratt County Medical Society in Pratt on October 22.

The scientific program at the one hundred and ninetyfirst quarterly meeting of the Golden Belt Medical Society, held in Salina on October 14, was as follows: "Podalic Version" (a motion picture) Dr. J. A. Simpson, Salina, discussion opened by Dr. Harry J. Davis. Topeka: "Multiple Tumors of the Sympathetic Nervous System", Dr. H. R. Wahl, Dean, University of Kansas School of Medicine, discussion opened by Dr. John L. Lattimore, Topeka; "Nephritis and Nephrosis" Dr. Ralph Major, Professor of Medicine, University of Kansas School of Medicine, discussion opened by Dr. Philip Morgan, Emporia: and "Traumatic Injuries of the Head", Dr. Frank R. Teachenor. Associate Professor of Surgery, University of Kansas School of Medicine, discussion opened by Dr. Murray Eddy, Hays. At the dinner which followed this program, Dr. Major spoke on "Hippocrates and the Isle of Cos".

The Greenwood County MD's Society for Indigent Care met in Eureka on November 3. The program included: "Liver Function and Differential Diagnosis of Jaundice". by Dr. V. E. Chesky, Halstead; and "Cardiac Manifestations of the Degenerating Thyroid", by Dr. George Westfall, Halstead.

A joint meeting of the Marion, McPherson and Harvey County Medical Societies was held in Marion on October 27. Dr. Karl A. Menninger. Topeka, spoke on "The Psychoneurotic and the General Practitioner"; and Dr. Norman Reider, Topeka, discussed "Headaches".

The McPherson County Medical Society met in Mc-Pherson on October 13. The program consisted chiefly of case reports.



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Election of officers was the principle order of business at a meeting of the Meade-Seward County Medical Society held in Liberal on October 1.

A meeting of the Saline County Medical Society was held in Salina on November 4. Dr. P. T. Bohan, Kansas City, Missouri, and Dr. Nichols. Oklahoma City, Oklahoma, were speakers. Approximately sixty persons attended, including representatives from several county medical societies in that area.

Meetings of the Sedgwick County Medical Society were held in Wichita on October 5 and October 19. Dr. Bernard L. Wyatt, Tucson, Arizona, was the speaker at the first meeting. His subject was "Fundamentals of Diagnosis and Treatment of Arthritis". The program at the second meeting was as follows: "Appendicitis Associated with Pregnancy"—Dr. A. W. Fegtly, Wichita; "The Tuberculosis Problem"—Dr. E. H. Terrill, Wichita; "The Cancer Problem"—Dr. J. S. Hibbard, Wichita; and "The Syphilis Problem"—Dr. J. E. Wolfe, Wichita.

A meeting of the Sumner County Medical Society was held in Wellington on October 21. Dr. Martin Palmer, Wichita University, on "The Relation of Speech Correction Work to the Medical Profession"; and Dr. Karl Voldeng, Wellington, presented a case report on "Infectious Mononucleosis".

Dr. L. J. L'Ecuyer, Greenleaf, was the speaker at a meeting of the Washington County Medical Society in Washington on October 12.

A tribute to the memory of the late Dr. C. L. Randall, of Neodesha, was read by Dr. A. C. Flack, Fredonia, at a meeting of the Wilson County Medical Society held in Neodesha on October 11.

#### MEMBERS

Dr. R. L. Gench, Fort Scott, has recently been elected a fellow of the American College of Surgeons.

Dr. Arthur E. Hertzler, Halstead, is the author of an article on "Conservative Operations for Nonmalignant Disease of the Uterus Attended by Hemorrhage", in the October, 1937, issue of The Journal of the Missouri State Medical Association.

Dr. A. D. Danielson and Dr. E. O. King of Herington, have recently purchased the Herington Hospital.

Dr. Karl A. Menninger, Topeka, addressed the members of the New York Academy of Medicine, New York City, on November 5. His subject was "Emotional Factors in Hypertension".

Dr. Charles Starr, Larned, has been appointed county physician of Pawnee County.

Dr. C. B. Stephens, formerly of Iola, has been appointed City Health Officer for Topeka.

Dr. G. G. Whitley, Douglass, has installed a new x-ray and fluoroscope.

Dr. Fred E. Rogers, Linn, has recently moved into new offices.

Dr. Opie W. Swope, Wichita, has moved his office from the First National Bank Building to the York Rite Temple Building, where he has installed new x-ray therapy equipment. Dr. A. F. Rossitto, formerly resident in roentgenology at Bellevue Hospital, New York City, is now associated with Dr. Swope.

#### DEATH NOTICES

Dr. George W. Allaman, 74 years of age, died September 24 at his home in Atchison. Dr. Allaman was born December 21, 1862, in Linn County, Iowa. He attended Avalon college, and in 1892 was graduated from Ensworth Medical College in St. Joseph, Missouri. He moved to Atchison in 1895 and practiced there continuously from that time until a few months prior to his death. He was a former president of Atchison County Medical Society and an active member at the time of his death.

Dr. William Francis Smith, 57 years of age, died May 1 in Atchison. Dr. Smith received his medical education at Ensworth Medical College, in St. Joseph, Missouri, from which he was graduated in 1909. He was an active member of Atchison County Medical Society for many years prior to his death.

### THE KANSAS CITY SOUTHWEST CLINICAL SOCIETY

The fifteenth Annual Fall Clinical Conference of the Kansas City Southwest Clinical Society, held in the Municipal Auditorium October 4 to 7, 1937, was an outstanding success from every standpoint.

The guest speakers were the feature attraction at the round table luncheons held daily. On October 4, Father Alphonse M. Switalla, Dean of St. Louis University School of Medicine, addressed the luncheon group on "The Influence of Economic Factors in the Medical Profession in the Future." The following day Dr. Alfred E. Barclay of Oxford, England, presented a very interesting talk on "It is Very, Very Wrong to Doubt What Nobody is Sure About." Dr. George Norberg of Kansas City and Dr. H. L. Kretschmer of Chicago, spoke on Wednesday. Dr. Ferris Smith, Grand Rapids, Michigan, and Dr. Waltman Walters of Rochester, Minnesota, addressed the luncheon on Thursday.

A large audience attended the public health meeting in the Music Hall of the Municipal Auditorium on Tuesday evening. Dr. Ira H. Lockwood, President of the Southwest Clinical Society, presided at the meeting. In a most entertaining manner, Dr. Burris Jenkins discussed "The Laymen's View of the Medical Profession." Dr. Robert A. Strong of Tulane University of New Orleans talked on "Preventive Pediatrics" and Father Alphonse M. Switalla of St. Louis spoke in his usual dignified manner on "The Patient and His Doctor."

#### **AUXILIARY**

Edited by Mrs. W. G. Emery, Press Publicity Chairman

Our president, Mrs. R. W. Urie, was unable to send her usual monthly letter to this column because she has been a victim of influenza. We regret her illness and the absence of her letter. We are glad, however, to get the news that Mrs. Urie is improving.



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SIGNED:	
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CITY	STATE

#### HOW TO ORGANIZE EFFICIENTLY

Mrs. T. D. Blasdel

The members of the American Medical Association, some 100,000 physicians of the United States, have asked their wives to cooperate with them in stressing a health program throughout the United States. Hence the auxiliary.

To organize a new auxiliary we obtain the cooperation of the secretary, the president or the advisory council of the state medical association in arousing the interest of one or more doctors of our county medical society. If we are assured that the county medical society wishes to have an auxiliary organized in our county, we ask the county president to have the state organizer or whomever she designates to contact some of the local doctor's wives if this seems advisable. It may be best for him to arrange a meeting of all the doctors' wives of the county and have the state auxiliary organizer meet with them to explain the workings of the auxiliary. If the wives wish to organize at once they may proceed according to Roberts Rules of Order Revised, page 284, electing a temporary chairman who will appoint a committee to draft a constitution. Roberts says, "Some societies require a strict enforcement of parliamentary rules, while others will obtain the best results by being informal."

The organizer, no doubt, will be able to furnish a copy of a constitution used in another county which will be helpful in formulating the constitution for the new auxiliary and she will also see that the necessary standing committees are appointed and that the officers and chairmen understand their duties. The names and addresses of officers and chairman are sent immediately to the state president so that contact between the state and county is at once established. The president of the county medical society appoints the advisory council at the time of organization.

We must remember that we are an auxiliary. Our activities must be subordinate to the parent body. We must never undertake a project until we have conferred with the advisory committee, county, state or national as the case may be. We pay one dollar dues, seventy-five cents stays in the state and twenty-five cents goes to national, for naturally there is a need for funds when we have an organization with a membership of 18,364, (3,000 more than last year), in 44 states. In our own state there are twelve counties organized.

When discussing auxiliary affairs with one who is not familiar with the work to be done you often hear the question, "But what is there for the doctors wives to do?" My answer would be that an auxiliary cannot possibly cover all its departments thoroughly any one year with the amount of work there is for each auxiliary to do in every county. The groupings are program, membership, social, Hygeia, publicity and scrapbook, legislative, historical and public relations. In small auxiliaries I'd try to have each committee represented by one member but in larger auxiliaries several should act on each committee with various towns represented when possible. The committees should be changed thru the years so our women may know the importance of all the work.

The first year of organization can be devoted profitably to getting acquainted with each other and becoming familiar with the various departments of the work. I would not advise bridge (we can all play bridge in groups not organized for a specific purpose as this is) or book reviews unless they bear upon some phase of our work. There is a wealth of material, scientifically sound for our programs which is entertaining and enlightening.

You say, "Shall we include philanthrophy?" You may. That's up to your group, of course, but personally I feel our opportunity to serve is so much greater and more lasting if we concentrate on health education. We, as doctors' wives, are in a position to know what is authenic. We might help hundreds of mothers, thru one lecture, sponsored by our public relations committee while we were making a layette (which might never be kept clean) for one mother. However the needs of the different localities determine this question.

Perhaps in your county you'll wish to concentrate one year on health education, another on Hygeia, or public relations and legislation as the need arises and over a period of years you can cover our entire auxiliary outline thoroughly and in a satisfactory way to yourselves and your communities. We should work under the direction of our state and national chairmen.

Personally, I feel if the auxiliary should do nothing more than place Hygeia in the hands of each community, this alone would justify its existence as an auxiliary. Use your imagination and think what it would mean if every pupil in the United States were receiving the health information that he might get from Hygeia. The American Medical Association has especially asked the auxiliary to place Hygeia in our schools.

We should be informed members and able to give out authentic information to other organizations to which we belong and guide the program committees in these groups in their selection of material pertaining to health and speakers on health subjects. If you want to be informed about auxiliary work read the Hand Book (your president has it) and see if you have the tools necessary for your committee work. Read the auxiliary page of the American Medical Association and state journals.

Read the news letter. In our little auxiliary we read it, jot our name on the back and pass it on to a member whose name isn't there. Read state and national convention reports.

Let us not criticize the organization until we have informed ourselves about its objectives and accomplishments, then we won't criticize.

It is a great privilege to be a member of an auxiliary and only wives, mothers and widows of doctors may belong in Kansas.

Don't be discouraged—Some years you won't accomplish much due to unavoidable conditions existing among your members but this difficulty will pass and a new year will come when you can carry on.



Or for other plate needs.

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#### CARCINOMA OF THE COLON COM-PLICATED BY AMOEBIASIS

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Generally, it is conceded that carcinoma, diverticulitis, and tuberculosis are the most common surgical lesions of the colon; however, there are other medical and surgical lesions of the colon which may occur coincident with, or be mistaken for, any one of these. Attention has been called frequently to amoebic lesions of the colon which were mistaken for cancer. Some writers consider cancer a sequelae or complication of a long standing amoebic dysentery. There is, however, a paucity in the recent literature of reported cases of cancer with amoebic dysentery.

In reviewing the literature, we have found five cases. Bargen¹ reports one case of carcinoma of the transverse colon complicated by amoebic dysentery, and Reed and Anderson² report four cases of carcinoma of the colon complicated by amoebiasis.

Gunn and Howard³ have observed a coexistence of amoebiasis and cancer and they mention that x-ray findings may not distinguish between the two. They also state that in amoebic dysentery, isolated chronic ulcers with progressive erosion form on the wall of the bowel. These amoebic granulomas may give symptoms which physically and radiologically are identical with those produced by carcinoma. They report three such cases.

#### AMOEBIC DYSENTERY

Since the Chicago outbreak of amoebic dysentery, the average physician has become more amoeba conscious. Previously he considered the disease as a tropical or sub-tropical problem and of little concern to the practitioner of the temperate climates. Since that time, however, he has come to know what specialists in

the field have long known, that it occurs in the temperate zone as well as in the tropics. It usually occurs sporadically, but at times assumes epidemic proportions. Further, he has become more aware of the fact that, while dysentery is its most common and characteristic symptom, it frequently manifests itself in other forms, thus justifying the more inclusive name "amoebiasis".

The diagnosis, while depending somewhat upon history, signs and symptoms, rests essentially upon the identification of the specific amoeba. This in turn waits upon appropriate laboratory technique and experienced laboratory personnel. Such facilities ought to be within the reach of any first class hospital.

With the broadening of our knowledge of amoebiasis, there has been a tendency to simplify and standardize its treatment. Three types of drugs have become generally accepted: first, ipecac and its derivatives; second, organic arsenic compounds; and third, the halogenated quinolines. They are all valuable drugs with a fair percentage of cures to their credit. However, none are without danger.

Of the ipecac derivatives, emetine hydrochloride heads the list. It is given subcutaneously in one-half to one grain doses. Not more than a total of ten grains can be given safely within the space of one month. Among the arsenicals, carbarsone is typical. It is given by mouth in four-grain doses after each meal for a period of not over ten days. The symptoms of arsenic poisoning must be watched for, and, of course, upon their first appearance carbarsone should be withheld. Toxic symptoms do not usually occur. Of the quinolines, vioform has achieved considerable favor. It is usually given by mouth in five-grain doses three times a day for a period of ten days.

Each of the above types of drugs has had its failures. All have shown serious toxic symptoms when not administered judiciously. Alter-

nating from one type to another, giving each type in interrupted courses and limiting the total amount given, seems to be the basic therapeutic procedure.

#### CARCINOMA

From the surgical standpoint, there is no doubt that carcinoma is the most important lesion of the colon.

Carcinoma of the colon may occur at any age, although it is more frequent in the fifth and sixth decades and more males are affected than females. We have found the ratio to be three to two.

Etiological factors of carcinoma of the colon as in carcinoma in general are still indefinite. It is a fact that cancer is prone to follow simple tumors such as polyps and adenomata, and because they occur most frequently in the rectosigmoid juncture, one could easily believe that irritation from chronic constipation would be an important causative factor. Long-standing ulcers and fistulas are also etiological factors.

The symptoms of carcinoma of the colon vary, depending upon the location and type of the growth. Lesions of the right half of the colon produce an altogether different picture from lesions of the left side. Carcinoma of the cecum, ascending colon, and proximal part of the transverse colon usually give as their picture marked loss of weight, loss of strength, secondary anemia, and debility. Obstruction in this type of growth is uncommon due to the fact that the fecal current at this point is liquid. All unexplained cases of secondary anemia should have intensive gastrointestinal x-ray studies. Occult blood and tarry stools are fairly common in the right-sided growth. Frank bleeding is rare.

The symptomatology of carcinoma of the left half of the colon is very different. Constitutional symptoms are usually lacking. The patient seldom complains of weight loss. Diarrhea, or any change in the bowel habits in a person previously normal or regular, should be investigated as they are indicative many times of some obstructive lesion in the left half of the colon. Mucus and blood in the stools should be investigated. In about sixty to seventy-five per cent of the cases of carcinoma of the rectum, bleeding is the predominant symptom. A tumor mass in the abdomen is also suggestive of carcinoma.

The diagnosis is based on the history, on digital, proctoscopic, and sigmoidoscopic examinations, and on the demonstration of lesi

ons by x-ray. Digital examination should never be omitted as three-fifths, or sixty per cent, of all colonic carcinomas are within reach of the finger. Proctoscopic or sigmoidoscopic examinations should be routine procedures in the examination of patients, giving a history of a change in the bowel habit, melena, or the passage of mucus from the bowel. During this procedure if a suspicious lesion is encountered, a biopsy should be taken to determine whether the lesion is benign or malignant. If the lesion is malignant, the grade of the malignancy should be recorded for prognosis and further management of the case.

X-ray is indispensable in the diagnosis of colonic lesions. In this examination, the barium enema is preferable to the routine gastrointestinal x-ray, because often the patient is partially obstructed and the barium given by mouth causes a complete obstruction of the bowel. This necessitates an emergency operation with its attendant high mortality, instead of a deliberate well-planned procedure. It is often helpful to use the double contrast method in the diagnosis of the polypoid type of growth. This is accomplished by evacuating the barium and inflating the colon with air before the final plates are taken. No examination of the colon is complete without a warm stool examination when dealing with a suspicious case of amoebic infection.

The prognosis is dependent upon the age of the patient, the location of the growth, its stage of advancement and operability. Dr. C. F. Dixon⁴ of the Mayo Clinic, reports a sixty per cent five-year cure in cases without lymphatic involvement. The later cases where the regional lymphatics are involved, show about a forty per cent five-year cure. The operative mortality in these cases varies from four to twelve per cent, depending upon the type of operation chosen.

The successful treatment of all carcinoma of the big bowel is surgical. All operations should be well planned and carried out deliberately whenever possible. The preoperative procedure is of the utmost importance. This is essentially rehabilitation of the patient by blood transfusions if necessary, and a diet high in calories, high in carbohydrates, and low in residue, with gradual decompression and adequate cleansing of the colon. The operation chosen depends upon the type of lesion present, its location, and the condition found when the abdomen is explored. The various tech-

niques are fairly well standardized. The operations are usually graded procedures and are adequately described in all textbooks of surgery. The postoperative treatment is very essential, these cases require constant attention. Complications are frequent. Care is taken that the patient receives adequate morphine in sufficient amounts to restrain peristalsis until there has been either healing of the anastomosis or closure around colostomies, etc. Fluids are given intravenously and withheld by mouth and bowel.

In support of the above, we wish to report two cases of cancer of the colon complicated by amoebic dysentery.

#### CASE REPORTS

Case I. Mrs. J. S., age 66, white, widow, was first seen on April 11, 1936. She complained of a lump of three months duration in the left side.

Family history: Father died of carcinoma of the bowel at the age of 76. One maternal aunt died of cancer. The family history was otherwise negative. The past history was negative except for an operation for ulcer of the stomach in 1929 after which the convalescence was uneventful. The patient stated that she had noticed a soreness on the left side of her abdomen about three months ago. She then noticed a swelling which was lanced two weeks later with the evacuation of a brownish pus. Drainage continued for seven weeks. It had an offensive odor but had become frankly purulent at the time of our examination. She had lost thirty-two pounds in weight, and had become noticeably pale. She noticed a looseness of the bowel about three weeks after the lump in the left side appeared, and this condition had continued, the patient having four to eight bowel movements daily. There is no history of heart, lung, or kidney trouble.

Examination revealed an anemic, sick-looking woman with marked cachexia; height, five feet, five inches; normal weight 149 pounds; present weight 124 pounds. The mucous membrane of her mouth and eyes was pale, remaining teeth good, tonsils atrophic. There was an adenoma of the right lobe of the thyroid about one inch in diameter. Examination of the lungs revealed diminished breath sounds with rales at the left base. The heart was negative, and blood pressure 110/50. Examination of the abdomen revealed a mass extending almost from the navel to the costal margin on the left side and extending well into the flank.

There was a sinus discharging purulent material above the left ileum. The glands in both axillae were large. Vaginal examination revealed an atrophic vaginitis. The cervix was posterior, no masses were felt. The extremities showed an edema two plus of both ankles.



Fig. 1. Case One. X-ray showing filling defect in the sigmoid.

Laboratory results: Urinalysis, negative; blood count 2,350,000 R.B.C., hemoglobin thirty-five per cent, W.B.C., 18,920, with neutrophils seventy-nine per cent, lymphocytes fifteen per cent, mononuclears four per cent. There were no eosinophils. Warm stool examination disclosed the presence of entamoeba histolytica. The blood Wasserman was negative. X-ray examination with the barium enema showed an almost complete obstruction of the barium flow which was thought to be either the result of intrinsic carcinoma or extrinsic pressure.

X-ray of the chest was negative for metastasis. The right diaphragm was shown to be a little higher than the left in its anterior portion. X-ray examination following the introduction of twenty-two cubic cm. of opaque material in the sinus on the patient's side disclosed that the material passed through a narrow sinus to the posterior abdomen then upward to the level of the twelfth rib and down to the level of the first segment of the sacrum. All the opaque material was definitely behind the portions of the colon which was outlined by gas. The lower extension is so close to the ileum that it appeared to be following the soft muscle

downward. Intravenous urography showed an early hydronephrosis on the left side, presumably the result of ptosis rotation. and diagnosis was amoebic dysentery, secondary anemia and carcinoma of the sigmoid flexure of the colon.

Subsequent course: The patient was given separate courses emetine hydrochloride. carbarsone and vioform. On the twenty - fourth April, 1936, an exploration of the mass in the left side and sinus tract revealed the following: a considerable amount of friable tissue which had the appearance of a new growth. This was removed. It extended to the level of the twelfth rib and downward toward the pelvis for a distance of about four or five inches. On exploring the upper portion, a good quantity of this tissue was removed. It was impossible to remove all of the growth.

Dr. Paul Carson reported adenocarcinoma

from the frozen section.

The patient's general condition improved markedly. Due to the fact that she had symptoms of partial obstruction and considerable inflammatory reaction around the lesion and

some pain from the mass, she was given a series of x-ray treatments. She remained regained and weight until September 3, 1936, when she developed a diarrhea followed by a period of constipation. She began running a septic temperature and noticed loss of weight. About this time a cellulitis developed on the left side and she died November 27. 1936.

Case II. Mrs. M. G., age 63, white, widow first seen.



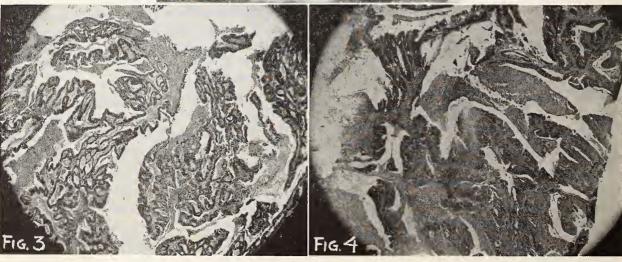


Fig. 2. Case Two. X-ray showing filling defect in the proxi-Fig. 3. Case Two. Photomicrograph of the lesion x 125. Fig. 4. Case Two. Photomicrograph of the lesion x 35. mal colon.

February 23, 1936. Her chief complaint was recurrent diarrhea of twenty-one month's duration.

Family history: Father died of carcinoma of the stomach. Mother died of pneumonia following a gall bladder operation. The remainder of the family history was negative.

Her past, personal, and marital histories were negative.

Present illness: The patient stated that she fractured her left hip at the World's Fair three years before. She had a fairly normal convalescence and left the hospital in September of that year. In February of the next year, she began having small, watery stools with mucus and blood. She had the feeling that the bowels were never completely emptied and it was necessary for her to take a cathartic every day. She began passing large amounts of mucus and blood and noticed a considerable amount of abdominal distention. About this time, she began to lose weight. In June, 1934, she passed large clots of blood. In May, she fractured a vertebra and was in the hospital until August. During this time, she wore a brace. The bowel condition became progressively worse. In the previous month, she had periods of extreme constipation followed by diarrhea. The bowels had not moved for three days prior to hospital admission. She also stated she had had a sore tongue for the past two months. The history was otherwise negative.

Examination showed an anemic elderly lady apparently in pain. She had a marked atrophic glossitis. All the teeth had been removed. The tonsils were atrophic. Examination of the lungs was negative. The blood pressure was 130/80, pulse 110, temperature 102 degrees. Examination of the heart revealed a soft blowing murmur beginning at the mitral area and transmitted to the left axilla. The abdomen was distended. Borygmus was discernible. There was marked tenderness along the left side of the colon and a mass was palpable in the left kidney area. Vaginal examination revealed the cervix to be anterior. There was a cystocele two and a rectocele two on a basis of four. The fundus was not present. Digital examination of the rectum was negative.

Laboratory results: Urine—albumin one on a basis of four, sugar none; R.B.C. one on a basis of four; pus two on a basis of four. Blood—hemoglobin forty per cent, dare; R.B. C. 3,000,000; W.B.C. 6,200; neutrophils seventy-five per cent; lymphocytes twenty-five per cent. Examination of the stool showed entamoeba histolytica.

Tentative diagnosis: Partial intestinal obstruction, amoebic dysentery, and pernicious anemia.

The proctoscopic examination was negative for twenty cm. Before a barium enema could be given, the patient had become completely obstructed and on February 27, 1936, it was necessary to do a cecostomy under local anesthesia. The patient made an uneventful recovery. She was given emetine and carbarsone and allowed to convalesce completely from the cecostomy. On April 5, 1936, she returned to the hospital. X-ray of the colon April 6, 1936, showed a constant filling defect in the upper descending colon. The stools were still positive for amoebic dysentery. X-ray of the chest was negative. An obstructive resection was done on April 10, 1936. There was a hard annular growth in the splenic flexure of the colon which was adhered to the spleen and the tail of the pancreas. The postoperative convalescence was normal except for a wound infection. Examination of the purulent material from the wound showed the presence of entamoeba histolytica. The treatment for the amoebiasis was continued as long as she was under our care.

A good-sized hard mass appeared in the left side of the abdomen in January, 1937. The patient was referred for insertion of radium and deep x-ray therapy. The patient is doing fairly well at the present time, but the amoeba are still present from the unclosed colonic stoma.

#### CONCLUSION

Two cases of carcinoma of the colon complicated by amoebiasis are reported. In one patient, the lesion was inoperable and she died of sepsis. The other is still under observation and treatment.

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As to the county medical society, all physicians in the community should join and support this organization for mutual help, for their own growth and for their civic responsibility.—Alexander H. Peacock, M.D., Seattle, Washington, Northwest Medicine, September, 1937.

## THE PRESERVATION OF BACTERIA DESICCATED IN A VACUUM AT ROOM TEMPERATURE*

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In 1909 Shackell introduced freezing and desiccation at low temperature in vacuo as a means of preserving bacteria, rabies virus, toxins, antisera, and complement. His results have subsequently been confirmed, with certain modifications of the original technique, by Shackell and Harris (1911), Hammer (1911), Shattock and Dudgeon (1912), Rogers (1914), Swift (1921), Brown (1926), Elser, Thomas and Steffen (1935), Flosdorf and Mudd (1935) and Boerner and Lukens (1936).

Apparently very little has been done toward studying the effect on viability, cultural and colony characteristics, antigenicity and virulence of pure cultures of bacteria desiccated rapidly at room temperature in vacuo. Gay, Atkins and Holden (1931) carried out a few experiments upon the survival of pneumococci desiccated to apparent dryness in two and four days respectively at room temperature and in a vacuum. They found that 8.62 per cent of rough pneumococci and 7.28 per cent of smooth pneumococci survived desiccation accomplished in two days compared to only 0.546 per cent rough and 0.042 per cent of smooth pneumococci that survived desiccation accomplished in four days. From this they conclude that the more rapid the desiccation, the greater the number of survivers. Moreover, they noted that some of their desiccated cultures of pneumococci contained living organisms for eighteen months or about 548 days.

It occurred to us that a more extensive investigation of the subject should be made in order to ascertain whether a simple, relatively inexpensive and rapid method could be devised for the preservation of stock cultures and of freshly isolated pathogens. It seemed also desirable to ascertain whether bacteria so preserved would retain their staining reactions, morphology, cultural and colony characteristics, antigenic properties and virulence. Such information would be not only of practical value to all interested in preserving bacteria unaltered, but might be of theoretical interest and importance. After

*The project was assisted by a grant from the Research Committee of the University of Kansas and by a student assistant supplied by the College Aid Program of the National Youth Administration.

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some preliminary experiments, the following technique was adopted:

#### **TECHNIQUE**

The organisms to be desiccated were grown for eighteen to twenty-four hours in or on a suitable medium. Plain agar, blood agar, chocolate agar, cystine agar, plain broth, and calcium carbonate blood broth constituted the various media employed. When grown on solid media, the growth corresponding to at least 0.1 cc. volume was removed with a platinum loop and transferred directly to the bottom of each of ten to fifteen small sterile tubes for desiccation. When a liquid medium or a broth suspension was employed, the broth cultures or suspensions were centrifuged and 0.1 cc. of the sediment placed in the bottom of each of a corresponding number of small sterile test tubes. (Wassermann tubes were employed.) In a few instances growth from blood agar was emulsified in three or four drops of sterile plain broth. As a rule, ten or fifteen tubes of each organism were prepared. This permitted us to test for viability at various time intervals.

The tubes were placed immediately in a vacuum desiccator containing phosphorous pentoxide in a flat dish. The desiccator was connected to a water pump for about five minutes to remove part of the air and then transferred to a Cenco Hy-Vac pump with a calcium chloride trap intervening. Within twenty minutes a vacuum of two mm. of mercury or less was developed in the desiccator and within thirty minutes or less the cultures appeared perfectly dry. The tubes were allowed to stand in the desiccator over night, removed the next morning and sealed with paraffin-vaseline mixture after the method of Swift (1921). sealed tubes were stored in the dark at room temperature. A short series of tubes were sealed by constricting the upper end of each tube to a capillary diameter, establishing a vacuum within the tube and sealing off in a flame. We have found no advantage in the latter method of sealing tubes. The paraffin-vaseline seal is efficient in protecting the sediment from mois-

To recover cultures the tubes were opened, the dry flakes in the bottom of the tubes pulverized with a dry sterile pipette and some of the powder transferred to fresh blood agar or other suitable medium. Sterile broth was then placed in the small tube to cover the remaining powder. The cultures were studied for their reaction to Gram's stain, morphology and cul-

tural or colony characteristics. In addition, certain ones were used to ascertain the effect of desiccation on their antigenic qualities and virulence.

Two sets of cultures have been used in these experiments. The first, consisting of sixty cultures, contained representative members of the two orders, Actinomycetales and Eubacteriales respectively. In the order Actinomycetales were Mycobacterium tuberculosis (avirulent) and Corynebacterium diphtheriae. These represent two genera of the family Mycobacteriaciae. In the order Eubacteriales were Neisseria intracel-Iularis, Streptococcus alpha, beta, and gamma, Diplococcus pneumoniae, Sarcina lutea, Staphylococcus tetragenus, Bacillus anthracis and subtilis, Clostridium botulinum, Salmonella paratyphi as well as schottmulleri, aetfryche and enteritidis, Eberthella typhi, Shigella flexner and shiga, Proteus vulgaris, Alkaligenes fecalis, Pseudomonas aeruginosa, Serratia marcescens, Klebsiella friedlanderi, Hemophilus pertussis and influenzae. The second set of cultures subjected to desiccation consisted of eighty-four strains of Shigella flexner isolated by Laybourn of the Kansas State Board of Health from cases of bacillary dysentery in Kansas and studied in this laboratory by Norris. The latter found all viable eight months after desiccation.

The results of this work may be summarized as follows:

#### VIABILITY OF DESICCATED BACTERIA

Desiccated pneumococci. Types I, II and III were prepared from sediments of calcium carbonate blood broth cultures desiccated as described. Tubes were opened and cultured after periods of 166 to 621 days. Every tube contained viable pneumococci.

Desiccated pneumococci. Types V, VII and VIII represented sediments washed from blood agar slants. Two out of ten tubes of type V have been opened to date and yielded no living pneumococci. In the case of types VII and VIII, one out of two tubes of each has yielded

viable pneumococci after 350 days.

Streptococci. Nine cultures of hemolytic streptococci were grown in calcium carbonate blood broth. Six of the cultures grew luxuriantly and three meagerly. Sediments were prepared and desiccated. Seven desiccated tubes of the six cultures that grew luxuriantly have been opened and cultured after periods varying from 230 to 834 days from the date of desiccation. and all tubes were found to contain viable

hemolytic streptococci. Of the desiccated streptococci prepared from the meagerly growing cultures, one has not been recovered from five tubes tested out of ten prepared while fifty and sixty-seven per cent respectively of the tubes containing the other two have yielded viable hemolytic streptococci after a period of 557 days from the date of desiccation. All tubes of desiccated alpha and gamma streptococci have yielded viable organisms when tested at periods varying from 241 to 878 days after desiccation.

Meningococci. Six cultures of meningococci were grown on plain blood agar slants, the growth removed and desiccated. The growth was good in one and scanty in five cultures. While viable organisms have been recovered in four of the six after periods of 315, 541, 565 and 595 days respectively, yet in only two of the four were all of the desiccated tubes examined found to contain viable meningococci. In the case of the other two, one tube out of six and two out of three contained viable organisms. The two cultures lost were from organisms that grew very scantily before desiccation.

Hemophilus pertussis and Hemophilus influenzae. Desiccated sediments of these organisms were prepared from growth on chocolate agar slants. Eight tubes representing two strains of H. pertussis were tested after 550 and 924 days respectively and half of them were found to contain viable H. pertussis organisms. In the case of H. influenza, two out of five tubes tested after 214 and 550 days respectively yielded viable H. influenza.

Pasteurella organisms. Two members of the genus Pasteurella, namely — avisepticus and tularensis, were not recovered when tested 125 and 993 days respectively after desiccation. Avisepticus had grown very meagerly before desiccation while the cultures of tularensis used for desiccation were relatively old.

Corynebacterium diphtheriae. Three of six tubes tested after an interval of 775 days yielded viable and typical organisms.

Other bacteria, from which viable organisms were found in all tubes of the desiccated sediments examined after 740 to 970 days were the following: Klebsiella friedlanderi; Pseudomonas aeruginosa, Serratia marcescens, Shigella flexner and shiga, Alkaligenes fecalis, Salmonella paratyphi, schottmulleri, enteriditis and aertryche, Eberthella typhi, Bacillus subtilis, Clostridium botulinum, Mycobacterium

tuberculosis, Sarcina lutea and Staphylococcus

The staining reactions, cultural and colony characteristics of all recovered organisms corresponded in every case to the ones possessed by the organisms before desiccation.

Antigenic Properties. The antigenic properties were studied by means of the Quellung reaction in the case of the pneumococci and by agglutination technique in two of the Salmonella organisms and the Eberthella culture. No change in the antigenicity resulted from desiccation.

Virulence. Virulence was tested and found unchanged in the pneumococci, Salmonella, Streptococci and anthrax cultures. Clostridium botulinum retained its capacity to produce toxin.

Desiccation of complement. Along with our experiments on bacteria we conducted a few experiments to ascertain the effect of desiccation in a vacuum at room temperature on guinea pig complement and found that it deteriorated in from one to two weeks after desiccation.

#### DISCUSSION

These results indicate that most pathogenic bacteria can be preserved in a viable state for long periods of time by rapid desiccation in a vacuum at room temperature. To insure their continued viability, the desiccated sediment must be kept free from moisture. This is accomplished quite simply by sealing the desiccated tubes with a paraffin-vaseline mixture as suggested by Swift. Apparently oxidation processes exert a deleterious effect if permitted to occur to any extent during the process of desiccation. We are inclined to agree with Gay's statements that "There is a marked decrease in living bacteria in the process of desiccation itself, however rapidly it be performed," and that "Slight variations in technique suffice to affect the resistance of pneumococci to desiccation." We feel, however, that by decreasing the time required for desiccation from two days as used by Gay to thirty minutes, has allowed us to reduce the mortality and thereby use smaller amounts of bacterial sediments. We found it important to limit the number of tubes occupying the desiccator at one time to not more than thirty because of the amount of fluid to be removed by desiccation. As a rule we have limited the number to twenty; this meant that less than three cubic centimeters of fluid had to be removed. We noted that when we prepared sediments from young calcium car-

bonate blood broth cultures showing vigorous growth that as a rule all of the tubes containing desiccated sediments contained viable organisms. Where desiccated sediments were prepared from solid media showing meager growth, we not infrequently found that more than one tube had to be cultured at subsequent dates to recover viable organisms. In only a few instances were we unable to recover the original culture. In our opinion these failures were due, at least in part, to the use of too small amounts in the preparation of the desiccated sediments. It is also conceivable that the inherent capacity of the cells to survive injury and start growing under the best conditions available are factors. Obviously optimum conditions for growth both in obtaining bacteria for desiccation and for recovery after desiccation are important.

#### CONCLUSIONS

Most pathogenic bacteria can be preserved in a viable state over long periods of time by desiccation in a vacuum at room temperature if the following criteria are observed: 1. Cultures grown under optimum conditions; 2. Adequate amounts of sediment for desiccation; 3. Development of a vacuum of two mm. of mercury rapidly; 4. Rapid desiccation; 5. Storage in desiccator over night; 6. Storage in sealed tubes in dark; 7. The planting of optimal amounts of desiccated bacteria on or in favorable culture media for recovery; 8. The tubes used for desiccation should be chemically clean and free from traces of deleterious substances.

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In Persia in the eleventh century, a secret society was organized for the purpose of murder. The members of this group found that the best way to accomplish this was to fill themselves up with Indian hemp, or hashish (Marijuana). Because of this custom they were called "hashishins", which we have shortened to assassins.-From Clinical Medicine and Surgery, September 1937.

## THE MANAGEMENT OF URETERAL CALCULI

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Since early times, the management of stones in the ureters has been the subject of many articles and discussions at urological meetings because it is a subject that presents many problems. It is not the purpose of this presentation to discuss the etiology, symptomatology or diagnosis of ureteral calculi but to bring out the essential points in the management of them.

We are located in a district in which urinary calculi are exceptionally numerous and when we study the anatomy of the urinary tract we readily understand why ureteral calculi are common. It is universally agreed that the majority of stones in the upper urinary tract become impacted in the ureters and more aften in the pelvic portion. Anatomically, this is explained by the variations in the calibre. There are three normal constrictions of the ureter decreasing in size from above downward. The first is at the junction of the kidney pelvis and the ureter and measures about four mm, in diameter. The second is at the brim of the pelvis or where the ureter crosses the iliac vessels and is about three mm. in diameter. The third and narrowest is where the ureter passes through the bladder wall and is about two mm. in diameter with the orifice measuring three mm.

As the ureter enters the bony pelvis, it sweeps outward and backward following the lines of the pelvis curve, making two turns, The first is at the point where it crosses the iliac vessels and drops into the true pelvis. In the female, upon gaining the walls of the pelvis, the ureter constitutes the posterior and inferior boundry of the ovarian fossa and continues down in front of the vessels to a point opposite the ischial spine. Here it turns medially, enters the base of the broad ligament to continue to the antero-lateral aspect of the cervix and upper part of the vagina. The terminal segment, approximately two inches in length, lies embedded in the connective tissue between the cervix and the bladder and close to the anterior vaginal wall. In the male, the lower portion is in close proximity to the seminal vesicles. From the study of the size and course of the ureter, one would expect to find the majority of calculi at the brim of the pelvis or between the brim and the bladder.

Having made the diagnosis of a ureteral calculus, the question arises as to what should be done. The management of ureteral stones consists in enabling the patient to pass them or removing them. There are three procedures available:

- 1. Expectant treatment which is medical treatment alone.
  - 2. Cystoscopic manipulation.
  - 3. Surgical removal by open operation.

In selecting our procedure, we ask, will the stone pass spontaneously? When should manipulative treatment be instituted? How long should it be continued before operation is advised?

#### MEDICAL TREATMENT

Fortunately nearly ninety per cent of the ureteral calculi will pass without surgical removal and the majority of these will pass without instrumentation. Before advising expectant treatment, it is necessary to determine whether the stone is too large and whether it is impacted. The chief indication for medical treatment is found in the cases with small stones and those that cannot be seen in the x-rays. Patients that have been in the habit of passing stones should be treated conservatively because they usually pass the stones before they are of any size. It is most suitable in patients in which the urine is sterile but may be tried if there is only a slight degree of infection present.

The actual descent of the stone is brought about by the propulsive force of the urine behind the stone as a driving force and the relaxation of the ureter below the stone. We know that complete relaxation of the ureter favors expulsion of the stone but at the present time no drug is known to be specific. We must depend upon the various sedatives; the administration of diuretics and large quantities of fluids. Relaxation is favored by hot baths and douches or enemas.

Medical treatment should not be continued too long in any case and the most important indications to abandon expectant treatment are:

- 1. Cases of frequent severe renal colics in which the patient is exhausted from the repeated attacks.
- 2. Signs of renal back-pressure which are manifested as a constant dull pain and tenderness in the kidney region and at times the palpation of the enlarged kidney.
  - 3. Signs of infection which may be shown

by increased pain and tenderness with fever or fever and chills.

- 4. A continuous vomiting which readily dehydrates the patient.
- 5. Failure to move downward in a month or six weeks of observation by the aid of the x-ray.

#### CYSTOSCOPIC MANIPULATION

The contra-indications to the continuation of medical treatment are usually indications for cystoscopic manipulation. In my opinion, the most suitable cases for cystoscopic methods are those with stones less than ten mm. in diameter and that have only recently been impacted. These are usually too large to be expelled by the patient and too small to justify immediate operation. Those in the lower ureter are more amenable to cystoscopic treatment than those in the abdominal portion.

Many ingenious ureteral instruments have been presented but our chief reliance in instrumentation lies in changing the axis of the stone. Therefore I feel that the catheters of various types are our most valuable instrument. The dilatation that we get from the catheter, if there is no true stricture, is small because we are endeavoring to dilate a muscular tube and the introduction of an instrument is followed by a spasm of the circular musculature which may grasp the stone more firmly. Our greatest accomplishment in removing stones is gained by leaving the catheter a few hours. It affords the most rapid relief of colic; it assures drainage and produces a gradual relaxation of the ureter which often allows the stone to follow the catheter when it is removed. If the stone is in the intra-mural portion of the ureter, meatotomy may aid in expulsion but when the stone is just outside the bladder nothing is accomplished because the beginning of the intra-mural portion is smaller than the meatus.

Any manipulation is not without danger and I have never tried to remove an impacted ureteral stone without some fear. Persistent attempts to manipulate stones which are firmly imbedded may lead to a severe renal infection, a generalized infection, anuria or rupture of the ureter with other serious consequences. Often the trauma produced by the passage of various instruments offsets the occasional immediate removal and manipulation should not be tried:

1. When the stone is larger than ten mm. in diameter.

- 2. When the stone is cylindrical which means it is impacted.
- 3. When there has been no movement after several manipulations.
- 4. When there is continuous pain in the kidney with or without fever which results in a hydronephrosis or a pyonephrosis.
  - 5. When cystoscopy is badly tolerated.
- 6. When one is unable to get a catheter by the stone.
- 7. When there is extensive disease of the opposite kidney.

#### SURGICAL TREATMENT

With any of the above named conditions, it may be wise to resort to surgical treatment. Operative treatment does not merely mean removal of the stone. The condition of the kidney should be determined before operation and if it is completely destroyed, nephrectomy with or without removal of the stone should be done. A stone left in the ureter after nephrectomy will give enough trouble in from two to five per cent of the cases to require a secondary removal.

Following the removal of the stone, there are two conditions which must be treated; recurrences and the persistence of infection. These may be best influenced by several dilatations of the ureter following the removal; administration of urinary antiseptics, cod-liver oil in some form and the forcing of fluids.

Let me say in closing, that in dealing with calculi in the ureter the most conservative treatment is that which safe-guards kidney tissue and kidney function. Uusually that treatment is the early removal of the stone.

#### DIAPHRAGMATIC HERNIA

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The diaphragm is a dome-like structure which separates the organs of the abdomen from those of the chest. It consists of a muscular peripheral part and a tendinous central part. According to the place of insertion on the skeleton a pars lumbalis, costalis and sternalis is differentiated. Small slits are found regularly between these parts just described.

Three large openings in the diaphragm permit the crossing of structures from the chest into the abdomen. The hiatus aorticus which is situated directly on the spine as high as the twelfth thoracic vertebra, through which the

aorta enters from the chest into the abdomen. The hiatus oesophageus is situated anteriorly to the last described; it permits the oesophagus to reach the abdomen. Both openings just described are in the muscular part of the diaphragm. The third large opening is the foramen venae cavae, lies in the tendinous part of the diaphragm and to the right of the midline; it serves the inferior venae cavae.

Theoretically, herniations could appear on all these openings but almost all diaphragmatic herniae are found on the left side of the diaphragm. Very likely because the liver prevents any herniation of this sort on the right side.

Diaphragmatic herniae are classified as to their location into parasternal, paravertebral, hiatal or parahiatal, or etiologically as congenital, acquired and traumatic. It is now generally believed that most of the diaphragmatic herniae are situated at, or near the oesophageal opening. Traumatic diaphragmatic herniae, of course, can make their appearance any place in the diaphragm as a result of penetrating wounds caused by gunshots, knives, etc. In these cases other abdominal viscera besides the stomach are usually involved in herniation through the diaphragm.

Stuart W. Harrington, Rochester, Minnesota, examined five hundred cases in the course of abdominal operations and found the closure around the oesophagus snug and did not permit the introduction of one finger in sixty-five per cent of all cases. In thirty-five per cent of the cases one finger was easily introduced in the oesophageal opening and in five per cent three or more fingers could be introduced easily in the diaphragmatic opening.

The diagnosis in these cases becomes a difficult problem. Almost all organs in the chest and abdomen have been blamed for the patient's symptoms. By looking through the literature it is found that patients have had as many as three abdominal operations without relief and without finding the cause. The following diagnoses have been made by mistake; gastric or duodenal ulcer, carcinoma of the stomach and intestines, gall stones and other gall bladder diseases, intestinal obstruction, tuberculosis, stricture or carcinoma of the oesophagus, angina pectoris, coronary artery disease. The symptomatology is too indefinite to establish the diagnosis of diaphragmatic hernia without Roentgen examination. It is for this reason that five times as many cases of diaphragmatic herniae were recognized in the last eight years as in the previous twenty-four years (Harrington).

Most of these herniae occur through the oesophageal opening and a large percentage of these affect elderly patients. The wear and tear on human tissue as life progresses, the loss of muscle elasticity, the deposit of fat and increased abdominal pressure, disease of the diaphragmatic muscle itself and many other factors may finally lead to a relaxation of the hiatus opening followed by herniation.



Fig. 1. Hiatus Hernia.

Once this condition is established, part of the stomach, usually the cardia, may slide back and forth into the dilated oesophageal opening or become permanently fixed; if we remember that both vagi nerves take their course through the hiatus oesophagus we can easily understand that reflex phenomena may soon make their appearance. In this connection the vagus pressure experiments as carried out by Dietrich and Schwieck in the Universitats Klinik der Charite in Berlin are of great interest; a small rubber balloon was introduced into the cardia of a dog stomach and placed inside the oesophagus high enough to reach the oesophageal hiatus; the insufflation of the balloon, by pressure against the vagi, reduced the coronary blood flow by two-thirds of normal; the release of the pressure in the balloon was followed by normal coronary flow; this reflex action upon the coronary arteries could be prevented by heavy doses of atropine or by cutting the vagi.

A decrease of coronary flow with the following ischemia of the heart muscle is today

considered the cause of cardiac pain of which angina pectoris is the most dramatic example. In view of the experiments just cited it is rather easy to understand that so many of the patients with diaphragmatic herniae are first diagnosed and treated as angina pectoris. The fact is that many of them really do have a decrease in coronary flow followed by more or less severe cardiac pain but their symptoms are of course, less amenable to rest and medication unless the true underlying condition is found and corrected.

The case I am about to report had all the classical symptoms of angina and was diagnosed as such until x-ray examination had proved it to be a large herniation through the oesophageal hiatus.

#### CASE REPORT

Mrs. S. P. C., age 69, was seen on March 27, 1937, in her home complaining of extreme pain in the region of the sternum extending to the left lower thorax, the left side of the neck and down to the left arm, dyspnea and vomiting. The pain came on suddenly while stooping during routine housework. Complete rest gave only partial relief but any attempt to move about would increase the pain, dyspnea and nausea.

From the patient's history we learn that she has always been in fair health, but that she had some vague gastro-intestinal disturbance all of her life. It was easy for the patient to vomit any time, certain foods did not agree with her. In June 1935 patient was hospitalized for an acute bronchial pneumonia of the left side with the right lower lobe area involved. At that time vomiting was one of the outstanding symptoms. The diagnosis of pulmonic infection was proved by x-ray examination and other laboratory tests. Supportive treatment was given. Patient made an uneventful recovery, but even after leaving the hospital. indefinite gastric symptoms were quite bothersome for several weeks.

The patient was not seen again until March 11, 1937, with the above mentioned complaints. On examination this patient appeared extremely ill. On general inspection she appeared cyanotic with a cold clammy sweat on the forehead. All during the examination patient continued to complain of pain in the left lower thoracic region and she vomited several times. She was a greatly over-weight individual, but according to her own statement, she had lost about thirty-five pounds in the last

six months. Pulse was somewhat irregular, 120 per minute. Pupils dilated. Heart; apex beat was within normal limits; tones distant and the rhythm irregular. No pericardial friction rub could be heard. On examination of the lungs moist rales could be heard in both bases and there was slight dullness on percussion at the left base. Abdomen; liver slightly enlarged; abdomen much distended. There was a slight degree of pitting edema in the lower extremities. Blood pressure; 135/80. Diagnosis; coronary thrombosis with beginning cardiac decompensation, hypostatic pneumonia.



Fig. 2. Hiatus Hernia (posterior view).

Immediate hospitalization was advised but refused by the patient at that time. Patient was given supportive treatment and morphine for relief. She became rapidly worse and finally permitted hospitalization on March 29, 1937. Routine laboratory work as well as gastro-intestinal x-ray and electrocardiograph were ordered. To my surprise the electrocardiagraph was normal throughout. Laboratory findings showed nothing of importance and for this reason are not included in this report. Throughout this period of observation the patient continued to vomit and was unable to retain even small amounts of water. The x-ray findings as reported by Dr. E. R. Deweese are as follows: "The gastro-intestinal study reveals a gross hiatus hernia with a low implantation of the esophagus on the lesser curvature of the stomach. The large gas pocket above the diaphragm is the fundus of the stomach and it shows an hour glass contracture produced by the abnormal opening in the diaphragm. The esophagus is not constricted and shows a moderate dilatation of the lower half. The high position of the stomach produces much distortion of configuration and position but no gross structural

changes could be made out within the stomach".

After the x-ray findings had definitely cleared the picture in this case, all feedings and medication by mouth were discontinued. Rectal feedings were instituted and patient was given intravenous glucose twice daily and codeine 1/4 gr. p.r.n. for relief from pain; atropine gr. 1/150 t.i.d. hypodermically. The barium introduced during the x-ray examination and all remaining food was removed from the stomach by gastric lavage.

After about three days of this form of treatment patient felt much better. Was relieved of the nausea and had no more vomiting. Very small amounts of liquid foods were given which the patient retained. On April 3 patient was sufficiently improved to leave the hospital. She is now able to retain a soft diet, has no pain or nausea.

Thirty days after the first entrance to the hospital x-ray examination was repeated and showed the following results: "At a repeated observation of the stomach there is no change in the size or position of the hernia, but it is possible to visualize the pylorus and duodenum to a better degree. There is not as much pyloric obstruction and gastric stasis as at the first examination. We are inclined to interpret the findings as a duodenal ulcer in addition to the developmental variation and hernia of the stomach. The colon is not well visualized due to the meager quantities of barium reaching the lower bowel but we find nothing more than a rather severe derangement of the motor function. There does not appear to be any developmental variation or involvement of the colon in the upper left quadrant anomaly. Even at the second examination the pyloric antrum and duodenum could not be well visualized due to its abnormally high restricted position, but we feel reasonably certain of no malignant degeneration. The duodenum is deformed and hyperirritable entirely consistent with a chronic ulcer. Further derangement of the motor function produced by the hernia of the stomach and low implantation of the esophagus."

At this time—Three months after hospitalization the patient is apparently fairly comfortable under diet and atropine. Some gastrointestinal symptoms are present at this time but if the patient becomes negligent in her diet, severe pain "around the heart" becomes an outstanding symptom. There is usually vomiting following this condition. A reclining position

does not exaggerate the pain; neither does an erect position relieve it, as is usually noticed in other cases of diaphragmatic hernia.

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#### MENTAL SYMPTOMS IN BRAIN TUMOR

A Review Of Some Of The Recent Literature

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#### INTRODUCTION

The diagnosis of brain tumor is generally based on neurological signs and symptoms aided by special procedures such as lumbar puncture, x-ray studies of the skull, encephalography, or ventriculography. Occasionally, definite neurological signs and symptoms are absent and the only indications (and sometimes the first) of intracranial neoplasms are mental symptoms. Unfortunately, the role of mental symptoms in brain tumor is determined in retrospect. After necropsy, the physician may review the clinical course and discover that the patient acted queerly or showed peculiar mental symptoms. It is, therefore, not only interesting but important to study the changes in mental processes that may be associated with brain tumors. From a practical viewpoint it is likely that the general practitioner is curious to know whether mental symptoms may be used as aids not only in making a diagnosis of brain tumor but also in localizing a tumor if present. The purpose of this paper is to review some of the recent literature on mental symptoms in brain tumors.

It is necessary at the outset to define the words mental, mental processes, and mental symptoms, terms that will be used interchangeably and synonymously. For our purpose these terms refer to five categories of human behavior: (1) Sensory experiences, perception, attention, concentration, and conscious states. These will be referred to under the general term, sensorium. (2) Feelings and emotions which will be referred to as affective behavior. (3) Higher psychic activity such as thinking, reasoning, the formation of concepts, synthesizing bits of knowledge or information into meaningful

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units, and manifestations of intelligence. (4) Memory (fixation, retention, and reproduction) and orientation. (5) Personality, the reaction of the individual as a functioning unit in social situations. These five categories of behavior constitute the mental processes to be discussed in this paper, and an attempt will be made to present some of the principal alterations in them as related to brain tumors.

#### DISTURBANCES IN SENSORIUM

It has been observed that disturbances in sensorium are the most common mental symptoms in brain tumors. The chief manifestation of this disturbance is an alteration in consciousness so that patients appear dull, drowsy, apathetic, somnolent, and stuporous.

Kennedy¹ observed that in tumors of the frontal lobes there appeared first a lessening of the power of attention. As the disease process progressed, the patient lapsed into stupor. This stupor, Kennedy believes, is typical of frontal lobe lesions. It differs from the type of stupor observed in hypothalamic lesions in that in the latter form the patient can be aroused and has a clear awareness or consciousness. while in "frontal" stupor the patients when aroused appear clouded and confused. Keschner⁴ and his co-workers were unable to confirm Kennedy's observations. The form of stupor described by Kennedy as characteristic of frontal lobe tumors was observed in fifty-five patients with temporal lobe tumors.

Rowe² studied fifty-two patients with tumors of the temporal lobe, and he observed changes in the conscious states of fifty per cent of these patients.

Keschner, Strauss, and Bender 3,4,5 in a series of three papers have reported that disturbances in sensorium are predominant among mental symptoms in brain tumors. Sixty-one of eighty-five cases of frontal lobe tumors had disturbances in sensorium consisting of inability to pay attention, a failure to maintain concentration, faulty perception, hallucinations, dullness, apathy, somnolence, and stupor. One hundred and ten cases of temporal lobe tumors were studied and eighty-seven patients showed similar disturbances in sensorium. The incidence of disturbances in sensorium was less in the study of tumors of the posterior fossa, being observed in forty-one out of 120 cases. Also the symptoms observed were mild and transitory although similar in character to the symptoms observed in frontal and temporal tumors.

Hallucinations as a form of sensory disturbance occur with tumors located in various parts of the brain, but most frequently in temporal lobe tumors. Keschner and his co-workers reported hallucinations in nine cases of frontal lobe tumors, nineteen cases of the temporal lobes, and four cases in tumors of the posterior fossa.

In cases of tumors of the uncinate gyrus hallucinations of taste and smell are frequently associated with each other. These patients frequently complain of disagreeable odors or tastes without any apparent cause in the external environment. Sometimes these hallucinations of smell and taste are associated with a peculiar "dreamy state," a condition similar to a petit mal attack.

Courville⁶ analyzed the records of 412 cases of verified brain tumors. He reported the occurrence of auditory hallucinations in thirteen cases. Of these six had tumors in the frontal lobes, five in the temporal, and two had multiple metastatic tumors.

#### AFFECTIVE DISTURBANCES

Many observers report that tumors of the frontal lobes produce disturbances, which are typical and pathognomonic of frontal lobe lesions, in the affective life of the patients. These patients are said to be optimistic, facetious, prone to causeless laughter, and given to punning. They lack completely any insight into the seriousness of their illness or the effect of their behavior on their friends and relatives.

Kennedy observed that patients with frontal lobe tumors were easily offended and had periods of excitement during which they laughed foolishly. They engaged in "trivial and meaningless jocosity."

Courville's study revealed that the patients with frontal lobe tumors at one time or another during the course of their illness showed the following emotional disturbances: irritability, obstinacy, euphoria, and querulousness.

Changes in mood were observed in thirteen of thirty cases studied by Kolodny⁷. The author grouped these changes under the headings of "exaltation" and "depression." Exalted patients appeared cheerful, loquacious, euphoric, and facetious. Depressed patients displayed emotional instability and had spells of causeless weeping alternating with uncontrollable or irresistable laughter.

Keschner, Strauss and Bender reported that fifty-four patients with frontal lobe tumors showed disturbances in affective behavior. Irritability was the most common symptom, occuring in twenty-three cases. In seven of these twenty-three patients, irritability was the first symptom to appear and in three cases it was the only symptom. Sixty-three patients with temporal lobe tumors showed affective disturbances and again the most frequent symptom was irritability. Other forms of emotional disturbances were anger, depression, hypomania, alternate depression and exaltation, and emotional instability. Euphoria, facetiousness, punning, and feeling of well being was observed as frequently in temporal lobe as in frontal lobe tumors. Keschner and his co-workers did not believe that these symptoms were pathognomonic of frontal lobe tumors. Disturbances in affective behavior were observed less frequently in tumors of the posterior fossa, occurring in twenty-nine out of 120 cases reported by Keschner and his group. The changes were slight and not persistent. Euphoria was observed in eight patients, facetiousness in two, depression in two, and irritability in eleven.

It is interesting at this point to mention the changes in affective behavior observed after surgical removal of frontal lobes. Brickner⁸ in an extensive study of a patient in whom partial bilateral frontal lobectomy was performed described interesting changes in the emotional life of the patient. The patient was a lovable, passive, and gentle individual before the operation. After surgery there was free expression of anger, aggressiveness, and negativistic behavior. He also showed open hostility toward his family and friends.

## DISTURBANCES IN HIGHER PSYCHIC FUNCTIONS

In this category of behavior, the chief disturbance in frontal lobe lesions is, according to Goldstein⁹, an inability to do "abstract" thinking as contrasted with the retention of normal function in "concrete" thinking. For example, such a patient may look at a watch and tell the time correctly, but he will be unable to imagine in what position the hands of the watch would be if the time were altered. The former is a "concrete" situation, and the latter, an "abstract" one. We may contrast Goldstein's interpretation with that of Brickner, who believed that the principal disturbance in higher psychic functions after frontal lobectomy can be interpreted as a failure to "synthesize" thought processes, particularly when many thought elements had to be unified.

Brickner observed also a great deal of stereotypy in thinking.

The effects of surgical amputation of varying quantities of brain tissue on the intelligence and higher psychic functions have been studied by Penfield and Evans¹⁰, Ackerley¹¹, and Fox and German¹².

Penfield and Evans described three cases in whom frontal lobectomy was performed. Following recovery from surgery one case showed a lack of ability to carry out planned activity, a second showed an inability to do mental arithmetic, play cards, and loss of initiative. The third case, in whom less brain tissue was removed, showed no disturbance in psychological activity.

Ackerly reported a case of a Hungarian woman in whom the entire right prefrontal area was amputated. Psychological tests administered two years later revealed the following results: (1) Average ability as measured by the Stanford Revision of the Binet Simon tests and the Arthur Performance tests. (2). No disability of immediate or remote memory. She could remember the details of a movie seen on the previous day better than staff members. Also there was no observable impairment in the management of the household. The patient could plan and buy groceries and other household articles as well as before the operation. After recovery from the operation, the patient was able to learn the English language better than her husband.

Fox and German reported test results on a patient in whom the left temporal lobe was removed. On the picture completion tests (Healy 1 and 2) the patient had an I. Q. ranging from 100 to 118. In all of the cases intelligence test scores prior to operation were not available for comparison. Hence, one does not know what the I. Q. was before the operation.

#### CHANGES IN MEMORY AND ORIENTATION

The term memory as used here refers to the process of acquiring information, retaining it, and being able to reproduce it. Orientation is defined as the ability to comprehend one's self in the environment with reference to time, place, and person.

Kolodny reported that thirteen out of thirty patients with frontal lobe tumors had memory disturbances affecting principally the memory for recent events. This observation has been confirmed by Sachs¹³ who stated that a constant mental symptom in frontal lobe lesions is the loss of memory for recent events with

good memory for events that occurred six or more months ago. The phenomena of loss of memory for recent events and the retention of memory for remote events is frequently called Ribot's Law. This law has been analyzed critically by Keschner et al, who pointed out that there may be and usually are multiple psychic disturbances in brain tumor cases and that memory defects do not exist alone. Of the significant associated disturbances is an impaired sensorium making the acquisition of new material difficult or impossible. It has already been mentioned that in many cases of brain tumor there is a clouded consciousness, a failure to pay attention, and to maintain concentration. These disturbances obviously interfere with memory for recent events and tend to explain more fully Ribot's Law.

Keschner, Strauss, and Bender reported that forty-seven of the eighty-five patients with frontal lobe tumors showed disturbances in memory and orientation. In eight cases it was the earliest symptom to appear. In tumors of the temporal lobes fifty-five out of 110 patients had memory defects and in nine cases it was the earliest symptom. In forty-seven of these fifty-five patients there was a co-existing disturbance in sensorium, in forty-four alterations in higher psychic functions, and in twenty-nine, aphasia. In tumors of the posterior fossa memory disturbances were relatively infrequent, being observed in only nine out of 120 cases.

The effect of surgical removal of portions of the brain on the memory process was noted in two of the three cases reported by Penfield and Evans. These two patients showed no memory disturbance after operation. The Hungarian woman in whom the entire right prefrontal area was removed could remember details of a movie seen on the previous day better than staff members, and two years after the operation she learned the English language better than her husband. The patient reported by Fox

and German in whom the left temporal lobe was removed gave some responses that suggested a lack of orientation as to time and place.

Brickner's patient showed no disturbance in immediate memory, being able to repeat eight digits forward and seven in reverse order. However, his performance as tested by the Woodworth and Wells Substitution test and the Stenquist Assembly test showed little learning from experience.

#### CHANGES IN PERSONALITY

Personality changes may be defined as an alteration in the individual's reaction to his social environment so that others with whom he came in contact recognized the change or were impressed by it.

Roback¹⁴ reported distinct changes in the personality of a child who was later found to have a brain tumor. The patient changed from a quiet, obedient, even-tempered child to a nervous, irritable, stubborn, and disobedient little girl. A tumor of the left cerebral hemisphere was removed and the child's behavior improved following the operation.

Kolodny described the following changes in personality observed in seven patients with frontal lobe tumors: "The patient becomes self-centered and extremely egotistic. He loses interest in his social functions as a member of the community. He becomes shameless about manners, clothes, expressions and morals."

Keschner, Strauss, and Bender reported that fifty-four of eighty-five patients with tumors of the frontal lobes showed changes in personality. In eighteen cases personality disturbances were the earliest symptoms. A further observation was made that when the tumor affected both frontal lobes or one frontal lobe and adjacent portions of one or both hemispheres, early changes in personality occurred much more frequently than in cases in which the tumor was limited to one frontal lobe. In temporal lobe tumors fifty-eight out of 110 cases showed disturbances in personality. The manifestations

TABLE I

The Incidence of Mental Symptoms as Related to the Location of Brain Tumors

Total number of cases of brain tumors	Frontal Lobes 85		Temporal Lobes 110		Posterior Lobes 120	
	Cases	%	Cases	%	Cases	%
Disturbances in Sensorium	61	71	87	79	41	34
Disturbances in Affect	54	63	63	5 <i>7</i>	29	24
Changes in Personality	54	63	58	52	16	13
Disturbances in Higher Psychic Functions		61	62	56	14	12
Disturbances in Memory and Orientation	47	55	55	50	9	7

(The writer compiled this table from the three papers of Keschner, Strauss, and Bender).

of personality disturbances were described as ranging from bizarre behavior to a syndrome resembling Korsakoff's psychosis. Only sixteen out of 120 patients having tumors in the posterior fossa showed personality disturbances.

Following frontal lobectomy, distinct changes in personality were observed in Brickner's patient. It has already been mentioned that prior to the operation the patient was passive and gentle. After the operation he was definitely more aggressive and showed a marked lack of restraint in his behavior. His friends noticed the change and remarked to Dr. Brickner that various modes of behavior were not characteristic of the patient.

## THE LOCALIZING VALUE OF MENTAL SYMPTOMS

From a clinical view point it is of extreme importance to know whether mental symptoms can be used in lateralizing or localizing brain tumors. Earlier writers thought that this could be done and have attributed localizing value to various mental symptoms as, for example, the belief (Kennedy) that a certain form of stupor was characteristic of frontal lobe tumors. More recent studies, especially those of Keschner, Strauss, and Bender, have demonstrated that mental symptoms hitherto thought to be pathognomonic of frontal lobe lesions are found in tumors located elsewhere in the brain. Hence, these symptoms have no localizing value.

Table I is helpful in estimating the localizing value of mental symptoms. It indicates that the percentage of patients showing the various mental symptoms was roughly equal for frontal and temporal lobe tumors, but distinctly less for tumors in the posterior fossa. From this data one may say that given a patient with mental symptoms in whom a brain tumor is suspected, the chances are greater that the tumor is located above the tentorium than below it.

Hallucinations appear to have more specific localizing value when associated with other findings. Complex olfactory hallucinations occurring with uncinate seizures and with or without dreamy states are indicative of a tumor of the temporal lobe involving the uncinate gyrus. The occurrence of visual hallucinations together with a homonymous field defect suggests a lesion in the temporal lobe on the side opposite that of the field defect.

#### THE PATHOGENESIS OF MENTAL SYMPTOMS

The appearance of mental symptoms in disease of the brain and particularly in brain tumors depends on several factors some of

which are demonstrable and others are not yet known. That the tumor itself is of some importance is suggested by the fact that surgical removal of the tumor is frequently followed by a disappearance of the mental symptoms. However, in these cases the mental symptoms may have been caused by a disturbance in the physiology of the nervous system rather than by the tumor per se. The size of the tumor alone does not explain the presence of mental symptoms for these may be absent in large tumors and present in small ones, and vice versa. The location of the tumor is of some importance as indicated by Table I, namely, that the incidence of mental symptoms in tumors of the posterior fossa is less than with tumors occurring above the tentorium.

A disturbance in cerebral hydrodynamics is of some importance in the production of mental symptoms. This is indicated by the fact that Strauss, and Keschner reported that forty-nine of the sixty-one cases of frontal lobe tumor who had a disturbance in sensorium had increased intracranial pressure. Sometimes the severity of the symptoms appeared to be in direct relationship to the increased intracranial pressure. It has often been observed that mental symptoms can be relieved by the administration of hypertonic solutions, lumbar, cisternal, or ventricular puncture. However, increased intracranial tension alone does not account for mental symptoms since these are sometimes present when the cerebrospinal fluid pressure is not elevated.

The influence of known pathological changes, such as occlusion of a cerebral vessel by tumor tissue and resultant ischemia and softening of the brain, is not known. These and other changes such as pressure necrosis are believed by some to be important factors in the production of mental symptoms. The possibility of toxic effects from tumor tissue directly or from disintegrating brain cells being important in the production of mental symptoms has also been considered by some investigators.

Finally there are those who believe that the tumor itself is a precipitating factor, and that the real causes of the mental symptoms must be sought in the dynamic factors which contributed to the individual's personality development.

#### SUMMARY AND CONCLUSIONS

Brain tumors may produce a variety of mental symptoms such as disturbances in sensori-

(Continued on page 524)

#### PRESIDENT'S PAGE

To the Members of The Kansas Medical Society:

In a few days Christmas and the Christmas holidays will be here. This is the season of joy and gladness. Wherever Christianity has reached more peoples of the world have been helped and have been freed from the shackles of bondage and superstition, regardless of their acceptance of its teachings, than from any other influence.

Christmas is also the season of forgiveness. As physicians it is the time for us to forget our personal and professional bickerings with our colleagues. We should realize that most of our quarrels are started because of a misunderstood act or statement of our friends, or even more frequently because of some "Old Wives Tale" carried by our patients. It is well to remember that the weak bear grudges, the strong forgive.

Another subject should be mentioned in this letter. We have been hearing over the radio, from the platform, and through the press about the activities of a group of men who are antagonistic to the American Medical Association's attitude on the practice of medicine. I refer to the Committee of Four Hundred and Thirty. In the November 27 issue of the Journal of the American Medical Association, on page 1618 is an editorial supported by the Board of Trustees, which you should read if you have not done so.

I would admonish each member of The Kansas Medical Society to study very carefully, communications and information of this kind which he receives. A number of Kansas doctors have received letters recently requesting their endorsement of plans which are definitely socialistic. Further efforts undoubtedly will be made toward the same objective. In all such communications look for "the nigger in the wood pile". There may be an extra joker in the deck. Paraphrasing Tennyson,

"Half a league, half a league Half a league onward, All in the valley of Death Rode the Four Hundred."

J. F. Gsell, M.D., President.

#### **EDITORIAL**

#### MERRY CHRISTMAS

The Editorial Board hopes that all members may have a joyful Christmas and a prosperous New Year.

The medical profession has experienced many problems of vital importance during recent years and it is undoubtedly true that many of these and additional ones will continue. There is, however, much in which the profession can find happiness and encouragement. Scientific medicine has made great advancement. There are today numerous procedures and cures which preceding generations of physicians would have said were impossible. We find, with very few exceptions, a general reduction in morbidity and mortality throughout the depression and otherwise. There is a blending of medical and public health activities which should produce material benefit for the public. The organizations of the profession are more alert and better organized than ever before, and their programs are more extensive and more efficient. All in all medical service in the United States, despite criticism and obstacles, is the best civilization has ever offered.

In the interest of further progress, we would like to submit the following suggestions for inclusion in your resolutions for the New Year:

That every physician resolve he will improve his scientific ability during this year; that he will avail himself of all postgraduate assistance possible; that he will attend as many Kansas medical programs as he can; and that he will attend at least one important intersectional meeting each year.

That he will attempt through publication in medical literature or through presentations at medical meetings, to provide his fellow practitioners with all assistance he can give.

That he will insist that his patients have at least one thorough physical examination each year in order that he may make his contribution to the reduction of syphilis, cancer, diabetes, heart disease, tuberculosis, and nephritis.

That he will aid and encourage his county medical society in the conduct of extensive programs for lay education.

That he will take an active part in the affairs of medical organization; and that in all other ways he will make his membership therein a benefit rather than a detriment.

#### COMMITTEE OF PHYSICIANS

Of especial interest to every physician in Kansas is the following statement issued by the Board of Trustees of the American Medical Association under date of November 27, 1937, and which pertains to the activities of the Committee of Physicians.

"Following the publication of the report of the American Foundation Studies in Government, a small group of physicians, assembled in New York, developed certain principles and proposals which have since been circulated by a self-appointed Committee of Physicians among the medical profession of the United States, with a view to obtaining signatures in their support. During a period of approximately six months, some 430 medical men have apparently permitted the use of their names. Early in November the self-appointed group of physicians released to the press for Sunday, November 7, a statement of principles and proposals to which the names of the 430 signers were affixed. The newspapers generally heralded this action as a revolt against the American Medical Association, in a great majority of the cases indicating that there was a revolt in behalf of state medicine. The publication of this manifesto and the attached signatures has been heralded with glee by many of those who have been opposing the Amedican Medical Association in behalf of cooperative practice, sickness insurance, and various fundamental changes in the nature of the practice of medicine. Within the last week another series of proposals has come from another self-appointed group requesting signatures of physicians. This series of proposals includes the suggestion for enabling legislation for sickness insurance.

"The American Medical Association is an organization of physicians along strictly democratic lines. Representatives of county medical societies send delegates to state medical societies

and these, in turn, send their delegates to the House of Delegates of the American Medical Association. It is possible for any physician, through his delegate, to obtain consideration of any proposal which he may wish to bring to the attention of the House of Delegates. At the Atlantic City session the delegates from New York State presented these principles and proposals, slightly modified, as an action of the House of Delegates of the New York State Medical Society. They were carried before a reference committee and, in several sessions of that reference committee, considerable numbers of physicians presented arguments for and against their adoption. The House of Delegates, however, after thorough consideration of the report of the reference committee, and with full cognizance of the method of development of these principles and proposals, and of the considerations which were involved in their passage by the House of Delegates of the New York State Medical Society, did not accept them. The House of Delegates did, however, point out the willingness of the medical profession to do its utmost today, as in the past, to provide adequate medical service for all those unable to pay either in whole or in part.

"Why, then, any necessity for the circulation of petitions presenting proposals for fundamental changes in the nature of development. distribution and payment for medical service? Is there a well-designed plan to impress the executive and legislative branches of our government with the view that the American medical profession is disorganized, distrustful of its leaders, undemocratic in its action and opposed to the best interests of the people? Who may profit from such evidence of disorganization? Is there any evidence that the selfappointed Committee of Physicians and the 430 physicians who have affixed their names to these principles and proposals are any better able to represent the opinion of the American medical profession than the democratically chosen House of Delegates of the American Medical Association—one of the most truly representative bodies existing in any type of organized activity in this country today?

"The House of Delegates has given its mandate to the Board of Trustees, to the officers and to the employees of the Association. That mandate opposes the principles and proposals emanating from the Committee of Physicians, and equally the new proposals. If the House of Delegates sees fit to depart from the prin-

ciples now established, it will be the duty of the Board of Trustees, the officers and the employees of the American Medical Association to promote such new principles as the House of Delegates may establish. Until, however, the regularly chosen representatives of the 106,000 physicians who constitute the membership of the American Medical Association (now the largest membership in its history) determine, after due consideration, that some fundamental change or revolution in the nature of development, distribution and payment for medical service in the United States is necessary, physicians will do well to abide by the principles which the House of Delegates has established. They will at the same time deprecate any attempts inclined to lead the executive and legislative branches of our government, as well as the people of the United States, into the belief that the American medical profession is disorganized.

"Members of the medical profession, locally and in the various states, are ready and willing to consider, with other agencies, ways and means of meeting the problems of providing medical service and diagnostic laboratory facilities for all requiring such services and not able to meet the full cost thereof. The American Medical Association has reaffirmed its willingness on receipt of direct request to cooperate with any governmental or other qualified agency and to make available the information, observations and results of investigation, together with any facilities of the Association. Thus far, no call has come from any governmental or other qualified agency, for the cooperation of the American Medical Association in studying the need of all or of any groups of the people for medical service, to determine to what extent any considerable proportion of our public are actually suffering from lack of medical care. The offer still stands as evidence of the willingness of the American Medical Association to aid in finding a solution to any or all of the problems in the field of medical care that now prevail."

The statement is clear, concise and accurate and we feel certain that it expresses the sentiment of the overwhelming majority of American physicians. Only one other thing can be said—that it is regrettable that a minority does not see fit to solve medical problems through the medical profession instead of through the public press.

#### TUBERCULOSIS ABSTRACTS

A review for physicians prepared monthly by the National Tuberculosis Association and published through the co-operation of the Kansas Tuberculosis and Health Association and The Kansas Medical Society.

#### THE TUBERCULIN TEST

The tuberculin test should be routinely used by every general practitioner. This is the unqualified recommendation made by all outstanding tuberculosis physicians. The general use of the tuberculin test will help to diagnose the many cases of early symptomless tuberculosis that now escape discovery. It directs the attention of the physician to the hidden foci of infection that so often go unnoticed to the detriment of families and communities.

Of the two accepted methods of giving the tuberculin test, the intracutaneous, intradermal method (Mantoux) is more accurate in that a known amount of tuberculin can be given and the dose increased if desired. For this reason, a slightly larger number of reactors can be found than is possible with the cutaneous (Pirquet) technic.

The following material has been used as an exhibit prepared by the National Tuberculosis Association for the meeting of the American Medical Association at Atlantic City in June, 1937. It shows the simplicity of the tuberculin test and furnishes graphic evidence of the advantage of P.P.D. (Purified Protein Derivative) over O.T. (Old Tuberculin).

TUBERCULIN TESTING requires little equipment.



1 cc. tuberculin syringe 26 gauge platinum needle of ½" length

#### TABLETS TUBERCULIN P.P.D.

are always ready in uniform strength for immediate use.



FIRST STRENGTH

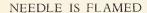


SECOND STRENGTH

Available in 5, 10, 20, 100 and 500 test packages. Two commercial firms, Parke Davis and Company and Sharp & Dohme at present hold a U. S. Government license for the distribution of P.P.D.

#### PREPARING FOR TUBERCULIN TEST

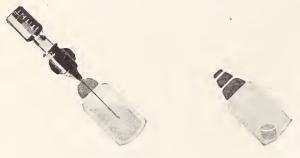




The proteins that form the active part of tuberculin are heat resisting to a considerable degree, hence flaming is preferable to boiling.



#### TUBERCULIN P.P.D. SOLUTION IS EASILY AND QUICKLY PREPARED



DRAW sterile buffered saline diluent into sterile tuberculin syringe.



TRANSFER diluent with aseptic precautions to vial containing tuberculin tablet and dissolve.

#### MAKING THE INJECTION

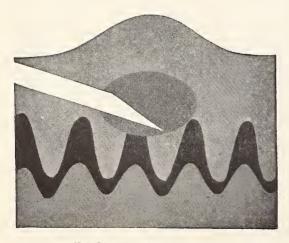


Cleanse flexor surface of forearm with 95% alcohol.

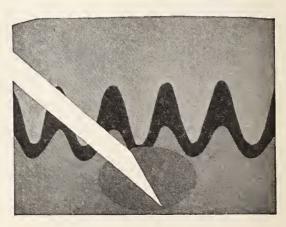


Needle is inserted intradermally (intracutaneous). Opening of needle faces up.

#### INSERTING NEEDLE



RIGHT—intradermal.



WRONG—subcutaneous

No local reaction may appear and general febrile reaction

may result.

#### INJECTION COMPLETED



Inject 0.1 cc. of tuberculin dilution.



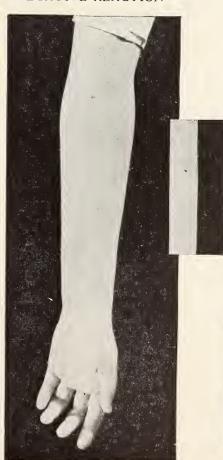
If this is done correctly a small white bleb will rise over the needle point.

#### READ TUBERCULIN TEST

48 Hours After Injection

Negative Reaction. No tubercle bacillus infection present, tuberculosis may be ruled out. However, if reaction following weak-strength (first) dose is negative, test should be repeated with stronger (second) dose. Sensitiveness to tuberculin may be absent in acute miliary or generalized tuberculosis and during some acute infectious diseases such as measles and whooping cough.

#### NEGATIVE REACTION



Positive Reaction. Tuberculosis infection present. Redness is of less significance than the swelling. When in doubt pass finger over the tested area, as the induration caused by the edema can sometimes be felt when it does not produce an elevation that can be seen.

## POSITIVE REACTORS should have a Chest X-ray.



#### POSITIVE REACTION



#### COMPARING REACTIONS FROM O.T. AND P.P.D.



Low Sensitive Reactors

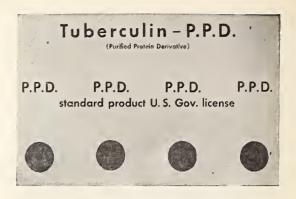


Medium Sensitive Reactors



Highly Sensitive Reactors

Preparations of O.T. vary widely in strength and hence reactions are not comparable



Low Sensitive Reactors



Medium Sensitive Reactors



Highly Sensitive Reactors

Dilutions of P.P.D. are of uniform strength and hence reactions are comparable

Each shaded area represents relative size of tuberculin reactions from identical dosage of O.T. and P.P.D. Black spots represent necrosis.

#### MENTAL SYMPTOMS IN BRAIN TUMOR

(Continued from page 517)

um, affect, memory, orientation, higher psychic functions, and changes in personality. The pathogenesis and clinical significance of mental symptoms in brain tumors have been discussed.

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#### **NEWS NOTES**

#### DUES

The 1938 membership reports will be forwarded to the secretaries of county medical societies on approximately December 15.

As approved by the last House of Delegates, the dues for next year will be \$10.00 per member.

The following ruling contained in the new Constitution and By-Laws will become effective as of January 1:

"A member of any component society who is shown in an annual report to be in suspension for non-payment of dues shall be reinstated by such component society upon payment of his assessment during that year. If a member shall remain in arrears in payment of his dues beyond the following December 31st, he shall lose his membership and shall not be entitled to reinstatement except upon formal action of his component society and upon payment of all assessments in arrears."

All members are requested to assist their secretary in the collection of dues by making prompt remittances.

#### PURE FOOD AND DRUGS

The Society recently forwarded the following letter to Senators Arthur Capper and George McGill and Congressmen W. P. Lambertson, U. S. Guyer, E. W. Patterson, Ed Rees, John N. Houston, Frank Carlson, and Clifford Hope:

"This organization has for many years been interested in the public benefit to be gained from improvement in federal pure food and drug legislation. The recent tragedy with elixir sulfanilamide has we think, emphasized clearly the need for change in our present laws on this subject. If you believe that we are correct in this regard, we would greatly appreciate any assistance you can give toward the early passage of a more efficient Federal Pure Food and Drug Act.

The American Medical Association is one of the best informed sources of information on this question, and thus we have taken the liberty of asking Dr. William C. Woodward, an official representative of that organization, to discuss this with you if time permits during the present session. If you do not already know Dr. Woodward we think you would like him very much, and also that you will find his suggestions in this connection very valuable.

Thanking you for your consideration, we are"
A suggestion is made that members forward their
Senator and Congressman any comments they care to
make in this direction.

#### SALES TAX

Information received from the Kansas Tax Commission indicates that the Commission is well satisfied with the operation of the rules and regulations governing physicians under the Kansas Sales Tax.

Only complication experienced to date in so far as physicians are concerned pertains to the Compensating Tax which is a companion law to the Sales Tax, and which operates as follows:

A tax of two percent is due and payable to the State of Kansas on purchases made from out of state suppliers."

In other words, a physician who purchases pharmaceutical supplies, surgical instruments, et cetera, from an out of state firm or firms is obligated to make certain that the above tax is remitted to the Tax Commission.

Since most purchases of this kind are made by mail or through salesmen, it is obvious that this duty may easily be overlooked. However, since the minimum fine for violation of the Compensating Tax Act is \$100 per violation, it is important that every physician adopt some workable system for this purpose.

A considerable number of physicians are utilizing the following method for the handling of this tax:

The physician requires as a condition precedent to purchase from out of state firms that the supplier make arrangement to remit the Compensating Tax, and that payment thereof be shown on all invoices.

This method has been approved by the Tax Commission; it eliminates the necessity of physicians making monthly returns; and most out of state suppliers have already made arangements or are willing to cooperate in this regard.

#### NEW OFFICE

The Executive Committee approved on December 6 the removal of the Society central office from the Stormont Building to the Columbian Building, 112 W. 6th Street, Topeka.

The major reason for the change is the need for additional space. The new office will afford an outer office, two inner offices, and a vault for storage of records.

Occupancy of the new quarters will be January 1.

#### **CULTS**

The Kansas Supreme Court held a hearing on the case of State vs. Gleason in Topeka on December 7. The foremost event of the hearing was argument on a motion to determine whether the law of the case shall be tried in advance of the facts. The court announced that it would hand down a decision on this point within the near future.

The case pending in the Federal Courts to determine the legal rights of osteopaths to use narcotics, and the case of State vs. Salley are being held in status quo pending the outcome of the Gleason case.

Mr. Theo. F. Varner, Assistant Attorney General, has advised the central office that C. Overstreet of Hoyt has agreed to discontinue further practice of the healing art. Overtsreet is alleged to have been treating cancer patients with a caustic paste. His offer to quit practice was apparently motivated by the fact that the Attorney General had commenced proceedings against him under the Injunction Law.

Mr. C. L. Clark, County Attorney of Saline County. has advised that the injunction proceedings against C. E. Wray, a tuberculosis practitioner of Salina, will be heard during the December term of the District Court in that county.

W. W. Cooper, cancer specialist of Altoona, who was enjoined from further practice on September 20, has ap-

pealed his case to the Kansas Supreme Court.

A. L. Ballentyne, Kansas City, Kansas, who was enjoined from further practice of the healing art on July 12, has quit practice and left the state.

A. B. White, a Topeka chiropractor, who advertised himself as a "graduate M. D.," has agreed to desist from further representations of this kind.

#### DISTRICT MEETINGS

The Committee on Public Policy has completed arrangements to hold a series of councilor district meetings for discussion of organization affairs of the Society.

The first of these meetings was held in Topeka on December 12, and was attended by members of the Fourth District. Speakers at this meeting were Dr. E. C. Duncan, Fredonia; Dr. R. W. Urie, Parsons; Dr. L. L. Bressette, Kansas City; Dr. W. M. Mills, Topeka; Dr. F. L. Loveland, Topeka; Dr. J. L. Lattimore, Topeka; and Clarence G. Munns, Topeka.

Additional meetings in the remaining districts will be announced in the near future. All members are urged to attend the meeting most accessible to their location.

#### MISSOURI MEETING

Through an inadvertent happening, the date established for the Annual Meeting of the Missouri State Medical Association was the same as the Kansas meeting—May 9, 10, 11, 12.

Since this produces complications for members and exhibitors who desire to attend both meetings, and since Kansas found it impossible to make a change in its established date, the Council of the Missouri State Medical Association, kindly agreed to advance its meeting to May 2, 3, 4, and 5.

The officers of the Society desire to acknowledge with appreciation, the cooperation of the Missouri organization in this regard.

#### FARM SECURITY

The following letter has recently been received from Dr. R. C. Williams, medical director of the Farm Security Administration (formerly the Resettlement Administration) in Washington:

"The purpose of this letter is to present to you the problem of medical care for clients of the Farm Security Administration in the State of Kansas. The cooperation and assistance of the Kansas State Medical Association is requested in working out some plan for medical care for these clients that will be mutually satisfactory.

The farm families who are clients of the Farm Security Administration are scattered throughout the state. These families average about 5 persons per family. It is our purpose to rehabilitate them and assist them to again become self-sustaining members of the community.

In order to become a client of the Farm Security Administration, a family must meet the following requirements:

- 1. Must be unable to obtain credit from any other source.
- 2. Must be recommended by the local County Re-

habilitation Committee, usually 5 persons, composed of one or more successful farmers, farm women and business or professional members of the community.

- 3. Must be located on or be able to obtain farm land.
- 4. Must have the stamina and determination that would indicate a desire for rehabilitation.
- 5. Must be physically able to do farm work.

The Farm Security Administration loans to these families a sum of money sufficient to enable them to make a crop. It has been observed that in a certain percentage of the cases, the handicap of illness or disease has been an important factor in either causing these families to be in their present situation or in preventing them from being rehabilitated. It is obvious that medical care is a vital factor in the rehabilitation of these families. For that reason we are requesting the cooperation and counsel of the Kansas State Medical Association in working out some plan whereby these clients may receive medical care for acute conditions and medical supervision that will prevent the development of disabling conditions that may continue to handicap them.

The average amount that is loaned to these families ranges between \$100 and \$800 per annum. The expected net cash income of these families will average from \$100 to \$400 for a year. It is felt that if some plan can be worked out whereby a definite sum may be set aside for medical care, a far step forward may be taken in conserving the health and in accomplishing the rehabilitation of these families.

In other states plans have been worked out whereby a definite sum is loaned to these families for medical care. This refers to general practitioner care, including home and office cases, obstetrical cases and the ordinary drugs.

With this I am attaching copies of plans that have been worked out in several states. These are intended merely as suggestions. We do feel, however, that it is important that we keep the cost of this medical care to a figure that is within the ability to pay of these families. The average amount per family that is set aside in the other states is approximately \$25 per family per year. This, of course, does not include surgical procedure or hospitalization.

I would be glad if you would consider this matter and present it to such committee of the association within whose province it falls, or to the council of the association for consideration. I would be glad to come to Topeka to discuss this matter with a committee or with the council at such time as you may indicate."

Reply has been made that the matter will be referred to the Medical Economics Committee and the Council for further reply.

#### STATE MEETING

Sedgwick County Medical Society advises that its committees are actively at work in completing arrangements for the next state meeting to be held in Wichita May 9, 10, 11, 12.

As reported in previous issues of The Journal, the 1938 meeting will be held in the Wichita Forum which

affords a large auditorium. ample section meeting rooms, and a floor space of 300x175 feet for exhibits.

Technical exhibits reserved to date are as follows:

A. S. Aloe Company American Optical Company Walter C. Ayers S. H. Camp Company Coca-Cola Company Denver Chemical Company General Electric X-Ray Corporation Holland-Rantos Company Horlick's Malted Milk Corporation Jones Metabolism Company Lederle Laboratories, Inc. Medical Protective Company Mid-West Surgical Supply Company C. V Mosby Company Petrolagar Laboratories. Inc. Philip Morris & Company Quinton-Duffens Optical Company W. A. Rosenthal X-Ray Corporation E. R. Squibb & Sons Tulsa Medical Distributors The Zemmer Company

Approximately ten or fifteen other reservations are expected.

The committee in charge of scientific exhibits is particularly anxious to make this year's scientific exhibit section the largest ever presented by the Society. Members willing to provide scientific exhibits are requested to write Dr. F. C. Helwig, Chairman of this committee.

#### COMMITTEE MEETINGS

The following is a report of the minutes of committee meetings held during the past month:

A meeting of the Committee on Control of Cancer was held in Topeka on November 3, 1937. Members present were Dr. C. C. Nesselrode, Chairman, Dr. Marion Trueheart, Dr. Howard Snyder Dr. F. R. Croson and Dr. M. B. Miller. Dr. H. L. Snyder and Dr. F. L. Rector, Evanston, Illinois, representative of the American Society for Control of Cancer, were also present. Clarence G. Munns was present as Executive Secretary.

The first item for discussion was lay educational activity by this committee. It was agreed that the following policy shall govern all activities of this kind:

1. That every lay educational meeting on the subject of cancer assisted or conducted by this committee shall be under direct sponsorship or supervision by the county medical society in that county.

2. That if a county medical society desires to use or select its own speakers, it shall be given that opportunity, and the committee will assist in any way desired in providing talk outlines, pamphlets, movies, et cetera.

3. That in the event a county medical society desires for this committee to furnish speakers, physicians shall be selected who live in a different area than that in which the talks are to be given.

4. That the committee, in the interest of providing continuity in lay cancer education, requests the privilege of reading all lay talks

on this subject in advance of their being given.

5. That the committee recommends and urges that all county medical societies cooperate with all lay agencies and particularly the Kansas Women's Field Army in the dissemination of information on this subject.

The central office was asked to bulletinize this statement of policy to the county medical societies.

Instruction was also given the central office as follows:

- 1. That it shall attempt to secure through the Society or otherwise five or six projectors suitable for showing the American Society for Control of Cancer film strips on cancer. That if these are secured, six strips shall be ordered from the above organization. That as soon as this is completed announcement be made to the county medical societies that the projectors and strips are available for loan.
- 2. That packets of cancer information suitable for lay use and professional use shall be prepared. That the lay packet shall consist of pamphlets and articles approved by the chairman of this committee. That the professional packets shall consist of talk outlines to be prepared by Dr. Croson, Dr. Trueheart and Dr. Howard Snyder, and also of approved pamphlets.

Dr. Helm discussed with the committee possibilities for utilizing Social Security funds for publication of a cancer brochure and for presentation of a statewide cancer postgraduate program. The committee felt that both of these possibilities would be of assistance, and requested Dr. Helm to investigate and advise whether or not funds may be made available for this purpose.

Approval was given to the issuance of a bulletin urging the county medical societies to schedule at least one or two scientific programs on cancer during the current year.

The central office was asked to make a survey through the county medical societies to determine the number and kind of cultists and quacks who are treating cancer.

The possibility for holding a 1938 cancer control program was tabled until the next meeting to permit an investigation as to whether this may be conducted with the assistance of Social Security Act funds.

It was agreed that the members of the committee shall prepare a series of scientific articles on cancer with a view toward having these printed in a brochure. The procedure adopted for this project is as follows:

- 1. That the chairman shall appoint a sub-committee which will edit and correlate the articles.
- 2. That the articles when assembled shall be submitted to the Editorial Board for publication in consecutive issues of The Journal.
- 3. That the type for the articles shall be saved, and that the brochure shall be printed when type is available for all of the articles.

Following this meeting the committee met with the Advisory Board of the Kansas Women's Field Army.

Adjournment followed.

* * * *

A meeting of the Committee on School of Medicine was held in Emporia on December 5. A meeting of the

Committee on Maternal and Child Welfare is to be held in Topeka on December 19. Minutes of these meetings will be published in the January Journal.

Representatives of the Society met with the Kansas State Board of Cosmetology on December 13 in Topeka. Discussion at the meeting pertained to legislative plans of that Board.

#### **EPSTEIN SPEAKS**

Abraham Epstein, Executive Secretary of the American Association for Advancement of Social Legislation, New York City, and one of the foremost promoters of health insurance in the United States, was a speaker at a meeting of the Forum held in Topeka on November 30.

Mr. Epstein's subject was the Social Security Act, which he criticized severely from the standpoint that it does not produce enough benefits, and that its financing is obtained from all persons instead of the well to do. He stated frankly that his advice had not been accepted in the preparation of the Act, which he thought was to its material detriment. A sample of his talk is as follows: "We have a poor machine, a poor driver, and we are going down hill."

During the discussion following his talk he was asked several questions concerning his attitude on health insurance. Among these questions were: "If he believes that health insurance is economically sound, would he be willing to provide beneficiaries with cash payments whereupon they might secure their own service rather than medical service itself?" "If, as he evidenced, he feels that the English system is superior to that of the United States, how does he account for the fact that morbidity and mortality in that country are less favorable?" "Assuming that the minimum cost of a health insurance plan in Kansas would be \$40,000,000 per year, which is twice the general budget of the state, how does he propose to obtain financing?" His answers to these questions were evasive.

#### BULLETINS

The following bulletins pertaining to Society organization and Society committees were released during the past month to the secretaries of the county medical societies and the official representatives:

The Committee on Control of Tuberculosis desires to acquaint you with the following program which it has planned for this year and also to secure your suggestions concerning this work or any other work which you think it could and should accomplish:

1. As is generally known, there are four major agencies in Kansas interested in the tuberculosis problem: The Kansas Tuberculosis and Health Association, the Kansas State Board of Health, the State Tuberculosis Sanatorium at Norton, and the medical profession. As is also well known, these groups have in the past largely operated their programs on an individual basis which has frequently resulted in much duplication and overlapping of effort. It is believed that this committee, composed of representatives from the four agencies, can be of assistance in coordinating the activities of these groups and that a more uniform and more efficient Kansas tuberculosis program can thereby be provided. This, therefore, is to be one of the main objectives of this committee during the coming year.

2. The committee contemplates a thorough study of the adequacy of existing sanatoria facilities in the state and the preparation of recommendations to the Governor, the Board of Administration, and the legislature concerning the number, kind, and location of additional sanatoria.

3. It is planned also to study the existing facilities in the state for private pneumo-thorax therapy and to encourage extension of these facilities to the place that many tuberculosis patients may be cared for without state hospitalization.

4. Study is being made of the question of tu-

berculin clinics.

5. An investigation is to be made of the roentgenograph and fluoroscopic facilities of the state with a view toward making recommendations wherein the various localities may make addition of any needed facilities of this kind.

6. Study is to be given to the possibility of sponsoring postgraduate instruction on tuberculosis both at Norton Sanatorium and in the various

councilor districts.

7. The committee is to assist in sponsorship of a section on tuberculosis in The Journal and to attempt to present therein original Kansas material on this subject.

8. The Kansas State Board of Health is to be assisted in its present program of tuberculin testing and in its need to secure more complete reporting of

tubercular patients.

9. A scientific investigation is to be made of the possibilities for discovering minimal tuberculosis through contacts of known patients with the thought in mind that it may be possible to develop

an extensive program of this kind.

The committee feels that it has a great opportunity to aid in the preparation of the most efficient tuberculosis program Kansas has ever had and it desires to accomplish everything within its power toward that end. It believes though, that it will need the complete assistance of every county medical society if this is to be achieved and thus it would greatly appreciate your calling the above plans to the attention of your members in order that their present and future criticisms and suggestions may be received.

Very truly yours, Committee on Control of Tuberculosis Henry N. Tihen, M.D., Chairman

The Committee on Conservation of Eyesight desires to acquaint you with its contemplated program for this year and also to secure your suggestions and assistance thereon:

1. Close relations have been established with the Kansas Association for the Blind and the Kansas Society for the Prevention of Blindness. Mr. Lawrence Q. Lewis, Secretary of these organizations, has been invited to attend all meetings of this committee and several joint endeavors are being planned.

2. The committee has assisted in the drafting of the procedure for medical examination of blind assistance applicants under the Social Security Act and it hopes to continue serving in an advisory relation in this capacity. It hopes also to serve in a

similar way in the preparation and operation of plans for medical and surgical treatment of blind persons which is also included within the Social Security Act.

- 3. A study is being made of the medical case records available through the Blind Assistance Division of the Kansas State Board of Social Welfare. This represents the first available collection of information of this kind and it is thought that much information for prevention of blindness can be obtained therefrom.
- 4. The committee plans to issue to the county medical societies at sometime in the future a suggested program for reduction of blindness in Kansas.
- 5. Since it is known that a considerable number of physicians use remedies other than silver nitrate for prophylaxis of ophthalmia neonatorium, a study is being made of the scientific efficiency of all known preparations for this purpose. This is being done with a view toward recommending a change in the present Kansas law, which requires silver nitrate, in the event that result is indicated.
- 6. Study is also being made of the Kansas driver's license law in the interest of suggesting certain improvements which might be made therein in eyesight requirements.
- 7. Through an invitation received from the Kansas State Board of Administration, a survey is to be made of present and needed scientific facilities of the Kansas School for the Blind.
- 8. Cooperation is to be extended to other groups in the furtherance of sight-saving classes in public schools.
- 9. Plans are being made to provide an extensive lay educational program on the subject of conservation of eyesight.

The committee feels that there are many opportunities for public benefit in this field and it would thus greatly appreciate your calling this program to the attention of your members in order that their suggestions may be received concerning these and any other projects which it should attempt to handle.

Very truly yours,

Committee on Conservation of Eyesight Lyle S. Powell, M.D., Chairman

* * * *

The Committee on Auxiliary at a meeting held on October 5 requested that the following information be forwarded to you for consideration by the physicians in your county:

- 1. It is the belief of this committee that county medical society lay educational programs afford one of the best available means for opposing socialization, cultism, quackery and many other important problems with which the medical profession is confronted.
- 2. It is the further belief of this committee that a program of this kind might well include the following:
- a. Sponsorship of medical exhibits (available through this committee and the state auxiliary) at county fairs and other lay gatherings of importance.
- b. Assistance in having local libraries purchase worthwhile books on medicine, quackery and public health (plans are being made wherein an approved list of this kind will be published by this committee within the near future.)
  - c. Presentation of extensive medical and public

health lectures by county medical societies at meetings of women's clubs, parent-teachers organizations, civic clubs, schools and other lay organizations.

3. Since it is realized that programs of this kind require much assistance for successful operation, the committee desires to make the following suggestion: That this function be delegated to your auxiliary under direction of a committee of your society. That if you do not have an auxiliary one be organized for this purpose. That if for any reason an auxiliary is not desired, the wives of your members undertake this activity without an organization.

This committee plans on issuing in the near future several suggested procedures pertaining to local and statewide lay educational programs. If you feel that this activity is worthwhile, and if you believe that the wives of members can be of assistance in disseminating medical information, the committee would appreciate your society making advance organization arrangements in this regard, and its assisting the women's groups in executing the above procedures.

In the event your county is interested in organizing an auxiliary complete information concerning requirements for this purpose can be obtained if you will write the chairman of this committee.

The Committee on Auxiliary E. J. Nodurfth, M.D., Chairman

Questionnaire

Committee on Hospital Survey

- I. Medical Hospitals (those staffed or operated by the medical profession.)
- 2. In your opinion, are the present medical hospital facilities in your county (or the facilities which serve your county in the event you have no hospitals) adequate for maximum service to the sick. In other words, do you feel that you need a hospital or additional hospitals?
- 3. Can you name any special equipment or facilities which your medical hospital or hospitals should have to enable a better practice of medicine in your county?

II. Cult Hospitals

1. The following is a complete listing of the cult hospitals in this county. (Should include any institution of any size owned by cultists or quacks which holds itself out to the public as a "hospital".)

# 1938 AMERICAN MEDICAL ASSOCIATION ANNUAL SESSION

The Board of Trustees of the American Medical Association has appointed Doctor Howard Morrow of San Francisco as General Chairman of the Local Committee on Arrangements. Among other appointments of local sub-committees. Doctor Morrow has appointed Doctor F. C. Warnshuis, Chairman of the local committee on Hotels.

Fellows are requested to send in their requests for hotel accommodations to Doctor F. C. Warnshuis, Suite 2004, 450 Sutter Street, San Francisco, California, giving names of members in party, type of accommodations desired, time of arrival and departure.

Assignment of accomodations and their confirmation will be made for each reservation request. Do not write directly to any hotel as all reservations will be cleared

through the Hotel Committee.

Banquet Rooms and Special Dinners reservations must be made through the Hotel Committee. The same rule applies to special boards and allied organizational groups.

San Francisco affords first-class hotels capable of providing accommodations for 15,000 fellows and members of their families. However, early reservations are requested to avoid confusion and to insure individual choice. A pleasing surprise awaits every Fellow in the hotel accommodations of the Golden Gate City.

Those planning to visit San Diego, Los Angeles, Santa Barbara, Del Monte. Yosemite, or other California cities are urged to write in advance for hotel reservations in these cities. Following the American Medical Association Annual Session, the Rotary, Kiwanis, and Shriners hold their annual sessions in California. It is quite probable that many of the members of these organizations will visit points of interest before their conventions, thereby creating heavy demands on local hotels throughout the State.

#### COUNTY SOCIETIES

Dr. H. F. Spencer of Garnett was the speaker at a dinner-meeting of the Anderson County Medical Society held in Garnett on November 17. His subject was "Undulant Fever."

A meeting of the Barber County Medical Society was held in Sharon on October 25. Indigent medical care was the principal subject of discussion.

Members of the Bourbon County Medical Society met in Fort Scott on November 15. Dr. D. A. Williams and Dr. Harry Erni of Kansas City, Missouri, were 'speakers. Their subjects were "Peptic Ulcer" and "Tetanus, Its Treatment and Aspects", respectively.

A dinner meeting of the Butler-Greenwood County Medical Society was held in ElDorado on November 11. Dr. L. F. Steffens, County Health Officer of Butler County discussed case histories of poliomyelitis.

Dr. Warren R. Morton, of Green, was host to the members of the Clay County Medical Society on November 17. Dr. Donald R. Black of Kansas City spoke on "The Specific Serum Treatment of Pneumonia".

The Cloud County Medical Society met for dinner on November 9 in Concordia. Plans for a diphtheria immunization campaign, in cooperation with the Cloud County Commissioners and the Kansas State Board of Health, were discussed.

Dr. Lyle S. Powell, Lawrence, was elected president of the Douglas County Medical Society at the annual meeting held in Lawrence on December 2. Other officers elected were: Dr. N. P. Sherwood, Lawrence, vice-president; Dr. E. M. Owen, Lawrence, treasurer; Dr. J. M. Mott, Lawrence, re-elected secretary; Dr. J. B. Henry, Lawrence, censor; Drs. H. L. Chambers, and A. S. Anderson, Lawrence, state meeting delegates. Dr.

E. R. Keith and Dr. James Naismith were elected to honorary membership.

Dr. L. R. Engle and Dr. J. H. Danglade of Kansas City, Missouri, were the speakers at a meeting of the Crawford County Medical Society held in Pittsburg on November 18. Dr. Engle spoke on "The Present Status of Surgery of the Thyroid", and Dr. Danglade discussed "Problems in the Treatment of Latent and Late Syphilis". Dr. E. D. Plass, Head of the Department of Obstetrics at Iowa University School of Medicine, Iowa City, Iowa, and Mr. Tom Collins, Kansas City, Missouri, were the principal speakers at the annual meeting of the society held on December 12.

Election of officers was the principal order of business at a meeting of the Franklin County Medical Society held in Ottawa on October 27. Dr. J. F. Barr, Ottawa, was elected president; Dr. Victor Lofgreen, Ottawa, vice-president; Dr. P. R. Young, Ottawa, treasurer; and Dr. Geo. W. Davis, Ottawa was re-elected secretary. Dr. M. E. Pusitz, Topeka, discussed "Poliomyelitis". At a meeting of this society held in Ottawa on November 24, Dr. Geo. W. Davis, Ottawa, spoke on "Cannabinomania", and Dr. H. J. Terrill, Ottawa, presented a movie on "Cesarian Section". Invitations were extended to one hundred physicians from surrounding counties.

Harvey County Medical Society announces the election of the following new officers for 1938: Dr. C. V. Conwell, Halstead, president; Dr. A. S. Hawkey, Newton, vice-president; and Dr. J. L. Grove, Newton, secretary-treasurer.

Dr. A. E. Bence, Wichita, discussed "Fractures of the Elbow", at a meeting of the Lyon County Medical Society held in Emporia on November 6.

Members of the Marion County Medical Society entertained their wives at dinner in Marion on November 10. Dr. and Mrs. R. C. Smith, Marion, showed motion pictures taken on a recent European trip and Dr. T. J. Thomas. Florence related some of his experiences as a medical missionary in Africa.

A meeting of the Montgomery County Medical Society was held in Independence on November 19. Motion pictures pertaining to surgery were shown.

A meeting of the Northwest Kansas Medical Society was held in Hoxie on October 29. Speakers were Dr. E. H. Hashinger and Dr. R. Phillip Smith of the University of Kansas School of Medicine. Their subjects were "Hormone Therapy in General Practice" and "Hormone Therapy in Gynecological Conditions", respectively.

Dr. Fred Schenck, Burlingame was elected president, and Dr. F. M. Smith, Lyndon, was re-elected secretary at a meeting of the Osage County Medical Society held in Lyndon on November 4.

Dr. W. E. Mowery and Dr. O. R. Brittain. Salina. were the speakers at a meeting of the McPherson County Medical Society held in McPherson on November 10.

All physicians of central Kansas were invited to attend a meeting of the Saline County Medical Society held in Salina on November 4. Dr. B. H. Nichols of the Crile Clinic, Cleveland, Ohio, gave an address on "Roentgenology in the Diagnosis of Chest Diseases", and Dr. P. T. Bohan, Kansas City, Missouri, spoke on "The Importance of Neurosis in Medicine".

Members of the Pratt County Medical Society held a dinner-meeting on November 26 in Pratt. Every member of the society and twenty-one guests were present. Dr. Vern L. Pauley, Wichita, read a paper on "Tuberculosis of the Kidney". Dr. L. A. Jacobus of Winfield spoke on "X-Ray Treatment of Gas Gangrene".

The regular meeting of the board of directors of the Sedgwick County Medical Society was held in Wichita on November 23. Dr. Martin Palmer of the Speech Laboratory of the University of Wichita explained to the directors, the purpose and function of the laboratory, which is called the Flo Brown Memorial Laboratory. Following his presentation the board voted to approve Dr. Palmer's speech clinic, providing certain principles for cooperation with county medical societies adopted at this meeting are followed. Meetings of the Sedgwick County Medical Society were held in Wichita on November 2, November 16, and December 7, with the following programs:

November 2—"Psychiatry in General Practice", Dr. J. Gilbert Little, Wichita; "Evaluation of Normal Chest X-Ray Film", Dr. C. H. Warfield, Wichita.

November 16—"Treatment of Septicemia—A Modern Conception", Dr. E. M. Seydell, Wichita.

December 7—"Effect of Quinine Upon the Auditory Nerve", Dr. R. A. West, Wichita, with pathological discussion by Dr. C. A. Hellwig, Wichita; "Inclusion Blenorrhea", Dr. Geo. F. Gsell, Wichita.

The annual banquet of the Shawnee County Medical Society was held at the Shawnee Country Club in Topeka on December 9. Mr. Tom Collins of Kansas City, Missouri, was the speaker. A considerable number of members from northeast Kansas were in attendance.

A meeting of the Southeast Kansas Medical Society was held in Chanute on December 7. The program was as follows: "Foreign Bodies in the Eye, Ear, Nose, and Throat", Dr. J. F. Gsell, Wichita; "Prostate Gland", illustrated with lantern slides and motion pictures, Dr. E. A. Pickens, Wichita; and "Medical Organization". Dr. E. C. Duncan, Fredonia.

A dinner-meeting of the Sumner County Medical Society was held in Wellington on November 18. Papers on "Psychiatry in General Practice", and "Management of Pneumonia", were presented by Dr. L. Gilbert Little, Wichita, and Dr. K. W. Haworth, Belle Plaine, respectively.

Members of the Wilson County Medical Society and their wives met for dinner in Neodesha on November 9. Dr. and Mrs. C. H. Dewey, Altoona, were guests. The following officers were elected for the coming year. Dr. B. P. Smith, Neodesha, president; Dr. B. R. Riley, Benedict, vice-president; and Dr. E. C. Duncan, Fredonia, secretary-treasurer.

A meeting of the Wyandotte County Medical Society, was held in Kansas City on November 16. The following program was presented: "Anatomical Background of Lower Back Pain", Dr. L. V. Hill, Kansas City, discussion by Dr. W. J. Feehan, and Dr. L. G. Allen, Kansas City; "Enterostomy", by Dr. L. F. Barney, Kansas City, discussion by Dr. W. H. McKean, Kansas City, and Dr. J. F. Hassig, Kansas City. Other business included the unanimous adoption of the following resolution:

"Be it Resolved: that we, the members of the Wyandotte County Medical Society, cognizant of the untimely death of Wallace G. Kunz, D.D.S., are made to realize that we have lost a valuable friend and a forceful ally of the medical profession.

"Be it further Resolved: that, this expression of our deep and sincere sympathy be conveyed to Mrs. Wallace G. Kunz, Mr. Chester Kunz, Mr. Russell L. Kunz, and Mrs. Ralph R. Klatt, and a copy spread upon the records of this Society."

#### **MEMBERS**

Dr. F. H. Buckmaster, Elkhart, has recently installed a new x-ray machine.

Dr. Robert B. Gorman, formerly of Topeka, has recently moved to Winfield where he has associated with Dr. H. L. Snyder, Dr. Cecil Snyder, Dr. Howard Snyder, and Dr. H. H. Jones.

Dr. Arthur D. Gray, Topeka, spoke on "Social Diseases" at a meeting of the Rosetti Club, held November 18, in Winfield. The meeting was sponsored by Cowley County Medical Society.

Dr. O. A. Hennerich, Hays, was the honor guest at a recent dinner given in recognition of his twenty-five years of service on the staff of St. Anthony's Hospital. The dinner was given by the Sisters of St. Agnes who supervise the hospital.

Dr. R. C. Hoover, formerly of Eunice, New Mexico, has commenced practice in Lindsborg.

Dr. J. J. Hovorka, Emporia, was awarded a Medical Records Honor Certificate at the Congress of the American College of Surgeons held in Chicago during October.

Dr. W. L. Jacobus, Jr., Ottawa, has been appointed by the county commissioners of Franklin County to fill the unexpired term as county health officer of his father, the late Dr. W. L. Jacobus.

Dr. Benjamin Brunner, Jr., Wamego, has been appoined county physician of Pottawatomie County to fill the vacancy created by the resignation of Dr. W. F. Creviston, Olsburg, who has recently moved to Oklahoma.

Dr. J. S. Hibbard and Dr. A. W. Fegtly, Wichita, were speakers at a meeting of the Woods and Alfalfa Counties Medical Society at Cherokee, Oklahoma, on November 30. Dr. Hibbard spoke on "Surgery of the Stomach and Duodenum", and Dr. Fegtly spoke on "Appendicitis Associated With Pregnancy".

Dr. George W. Meeks, of Little River, has opened offices in Windom where he will spend two afternoons each week.

Dr. Charles Pokorny, formerly of Attica, has moved to Hoisington.

Dr. J. H. Rinehart, formerly of Lebo, has moved to Iola.

The Liberal Kansas Times under date of October 28 carries a tribute to Dr. George S. Smith, for fifty years of practice in Seward County. Dr. Smith was a pioneer physician of the county and practiced until several years

ago when failing health necessitated his giving up his practice.

The following members of Sedgwick County Medical Society recently presented lay information talks:

Dr. C. A. Hellwig, "Cancer", Parent Teacher Association of Horace Mann School in Wichita.

Dr. Willard J. Kiser, "Poise, Pose, and Posture", Parent-Teacher Association, Robinson School in Wichita.

Dr. Gilbert Little, "Some Phases of Psychiatry", P. E. O. meeting at Hutchinson.

Dr. Geo. E. Milbank, "Socialized Medicine", presented negative in a debate at the University Club of Wichita.

Dr. E. C. Rainey, presided over a question forum on medicine at a meeting of the Women's Committee of the Kansas Gas and Electric Company in Wichita.

Dr. Francis Schlitz, "Syphilis", at the Young Women's Christian Association in Wichita.

Dr. E. J. Wolfe, "Poliomyelitis", Linocln School Parent-Teacher Association in Wichita.

#### DEATH NOTICES

Dr. J. C. Fear, 82 years of age, died at his home in Waverly on November 4. Dr. Fear received his medical training at the College of Physicians and Surgeons of Keokuk, Iowa, from which he was graduated in 1877. He had practiced in Coffey County for over sixty years; had served as mayor of Waverly for five years; and was Representative in the State Legislature from 1917 to 1919. Dr. Fear had been a member of the Coffey County Medical Society, and at one time served as president of that organization for fifteen years.

Dr. Alvan M. Fortney, 55 years of age, died at his office in Lawrence on November 5. Dr. Fortney graduated from the University of Kansas School of Medicine in 1908, and had practiced in Lawrence and DeSoto for nearly 30 years. He was a member of Douglas County Medical Society.

Dr. Willis Longwell Jacobus, Sr., 68 years of age, died at his home in Ottawa on November 16. Dr. Jacobus attended Ottawa University and graduated from the University Medical College of Kansas City in 1900. He began practice in Lane, and moved from there to Ottawa in May, 1905, where he had since practiced. Dr. Jacobus was a member of the Franklin County Medical Society.

Dr. Anna A. Perkins, 65 years of age, died at the Allen Memorial Hospital in ElDorado on November 4. Dr. Perkins received her degree from the Kansas City College of Physicians and Surgeons in 1897 and moved to ElDorado immediately thereafter, where she had practiced continuously for forty years. Dr. Perkins was a member of the Kansas State Board of Health from 1929 to 1931 and was an active member of Butler-Greenwood County Medical Society.

Dr. Mortimer S. Reynolds, 72 years of age, died at his home in Yates Center on October 26. He graduated from the College of Physicians and Surgeons of Keokuk, Iowa, in 1890 and settled in Yates Center in 1905. He had been a member of the Woodson County Medical Society.

#### ANNOUNCEMENTS

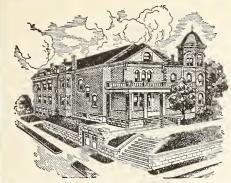
Application blanks are now available for space in the Scientific Exhibit at the San Francisco Session of the American Medical Association. June 13-17, 1938. The Committee on Scientific Exhibit requires that all applicants fill out the regular forms. Application blanks may be obtained from the Director, Scientific Exhibit, American Medical Association, 535 North Dearborn Street, Chicago, Illinois.

The next examination of the American Board of Obstetrics and Gynecology (written and review of case histories) for Group B candidates will be held in various cities of the United States and Canada, on Saturday, February 5, 1938. Application for admission to this examination must be on an official application form and filed in the office of the Secretary at least sixty days prior to this date. The general oral, clinical and pathological examinations for all candidates (Groups A and B) will be conducted by the entire Board, meeting in San Francisco, California, on June 13, and 14, 1938, immediately prior to the meeting of the American Medical Association. Application for admission to the June 1938 Group A examinations must be on file in the Secretary's Office before April 1, 1938. For further information and application blanks address Dr. Paul Titus, Secretary, 1015 Highland Building, Pittsburgh (6), Pennsylvania.

The American Medical Association and the National Broadcasting Company announce the fifth series of network health programs, which began October 13 and will run weekly through June 15, 1938. The programs will be presented over the red network each Wednesday afternoon at one o'clock Central standard time.

The American Board of Internal Medicine will hold its next written examination on Monday, February 14, 1938 in various centers of the United States and Canada. The examination will consist of two sessions of three hours each, with the morning session held at 9:00 o'clock a. m. and the afternoon session held at 2:00 o'clock P. M. The candidates who are successful in this written examination will be eligible to take the practical examination which will be held in San Francisco the Friday and Saturday prior to the opening of the Annual Session of the American Medical Assoication in June, 1938. The final date for filing applications for this written examination is January 15, 1938 and all applications should be in the office of the chairman before that date. For further particulars and application blands, please address Dr. Walter L. Bierring, M. D., Chairman American Board of Internal Medicine, Suite 1210. 406 Sixth Avenue, Des Moines, Iowa.

An examination of candidates for appointment as Lieutenant (junior grade), in the Medical Corps of the Navy, will be held at all Naval Hospitals in the United States and at the Naval Medical School, Washington, D.C., beginning May 16, 1938. Candidates for admission must be between the ages of twenty-one and thirty-two years at time of appointment, graduates of Class "A" medical schools, and have completed an internship of one year in a hospital accredited for interns by the American Medical Association and the American College of Surgeons. Those who are interested should write the Surgeon General, U.S. Navy, Bureau of Medicine and Surgery, Navy Department, Washington, D.C., for further information in regard to the examination and the procedure to follow for them to appear before one of the Examining Boards.



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Graduate courses for training in the various phases of venereal disease control have been instituted by Western Reserve University, Cleveland, Ohio, under authority of the United States Public Health Service and the Ohio State Director of Health. They will be open without fees to health officers and to physicians cooperating with state and local health departments in the states of Ohio, Michigan, Indiana, Illinois, Wisconsin, Minnesota, Iowa, Missouri, Kansas, Nebraska, North Dakota and South Dakota, but the number who can be admitted is limited. The course may be entered at any time when a vacancy exists, usually for a duration of three or four months or longer. Visitors may also be admitted for shorter periods, if they can be accommodated. The training will be informal and adapted to the individual needs of those taking the course. For example, to a clinician in a venereal disease clinic much clinical material is available and that portion of the training will be stressed. For the educator in a state health department, in addition to the clinical course, source material for talks to both lay and professional groups will be available and the student will be expected to prepare varied lectures. For the health department officials in addition to these features, case finding, case holding and morbidity reporting will be discussed more fully. Physicians who desire to take these courses should apply through their State Health Department to the Ohio State Director of Health. Application blanks, if not already at hand, can be obtained by addressing Dr. C. C. Applewhite, Regional Consultant for the United States Public Health Service, Room 314, U. S. Court House, Chicago, Illinois.

Announcement of the Ninth Gorgas Memorial Essay Contest has been made by Admiral Cary T. Grayson, Chairman of the Board of Directors of the Gorgas Memorial Institute, from the office of the institute at 1835 Eye Street, Northwest, Wasrington, D. C. The essay contests have become an annual feature of the program of personal health education carried on by the institute. High schools throughout the country are invited to enroll. Participation is restricted to students in the third and fourth years of high school. For the best essay written in each school, a bronze Gorgas medal is awarded and the student so honored represents his school in the state competition. A prize of \$10 in cash is given for the best essay in each state. The judges are state officials -the state health officer, state superintendent of education and the secretary of state. The state-prize-winning essays are then judged for the national awards. First Prize is \$500 in cash and a travel allowance of \$200 for a trip to Washington to receive the prize. Second Prize is \$150 in cash and Third Prize \$50. The subject for this year: The Achievements of William Crawford Gorgas and Their Relation to Our Health. The dates of the contest: October 21, 1937 to January 21, 1938. Full information concerning the contest may be found on school bulletin boards or can be obtained from the Gorgas Memorial Institute, Washington, D. C.

#### BOOK REVIEWS

OPERATIVE SURGERY, by Horsley and Bigger, 4th Edition, C. V. Mosby Co., St. Louis. This text, written in two volumes and totaling 1,350 pages, should have a wide field of usefulness. The material contained in the book is written so that it is easily understood, and procedures can be easily visualized. The organization is systematic, makes the material on any subject easily available, and hence makes it an excellent reference for operative therapy. The illustrations which appear

in generous numbers throughout the volumes, invariably show clearly the parts of a procedure most difficult to describe or to understand, and add greatly to the practical value of the book.

In the presentation of each subject, there is a general consideration of the topic, suggestions for preoperative preparation of the patient, the details of the operative procedure, any essential points in post-operative care, and a consideration of the advantages and disadvantages of the various procedures described. In addition to describing how the surgeon is to do an operation, it discusses the various types of treatment available for each condition, and hence is a valuable therapeutic guide.

In the general discussion of surgical principles at the beginning of the book, and in the presentation of the operative procedures for the diseases considered, the book is practical, and is as complete as one could imagine a book of this size to be. As Dr. Horsley states in the preface, it "does not attempt to be an encyclopedic work", but rather attempts to present those methods which have proved their value in the hands of the authors.—O. R. Clark, M.D.

HANDBOOK OF ORTHOPEDIC SURGERY—by A. R. Shands, Jr., B.A., M.D., St. Louis, The C. V. Mosby Company, 1937, 5.00. The author presents a most excellent short and concise handbook of the fundamental principles of orthopedic surgery. It is a rather comprehensive, well-sifted review of the present day knowledge concerning orthopedic surgery. It is, of course, intended for the medical student and the general practitioner, and for this reason the question of treatment is touched upon but lightly, but the descriptive elements are enlarged upon. Much of the older, very seldom used, methods of treatment have been discarded and much of the newer concepts of the diseases and deformities have been stressed and included. It is moderately well illustrated, very well written, with an excellent bibliography and index. All in all it will be an excellent book for the general practitioner and the medical student to have in order to have a bird's eye view of this particular speciality.-M. E. Pusitz, M.D.

## NEW BOOKS RECEIVED

THE MANAGEMENT OF FRACTURES, DISLO-CATIONS. AND SPRAINS-By John Albert Key, M. D., Clinical Professor of Orthopedic Surgery, Washington University School of Medicine, St. Louis, Missouri, and H. Earle Conwell, M.D., Consulting Orthopedic Surgeon to the Tennessee Coal, Iron & Railroad Company, Birmingham, Alabama. Second Edition, published by The C. V. Mosby Company, St. Louis, at \$12.50 per copy. Octavo 1246 pages with 1222 illustrations. Cloth. The authors in the preface state "In this edition we have incorporated those additions and changes in our methods of diagnosing and treating fractures which since the publication of the first edition we have found beneficial and which we believe to be sufficiently important and well tested to warrant publication in a textbook." Every chapter has been reviewed with numerous changes, particularly in those dealing with fractures of the spine and hip. In two parts, Principles and General Aspects and Diagnosis and Treatment of Specific Injuries. Includes a chapter on Workmen's Compensation Laws.

CRIPPLED CHILDREN THEIR TREATMENT AND ORTHOPEDIC NURSING—By Earl D. Mc-Bride, M.D., Assistant Professor of Orthopedic Surgery,

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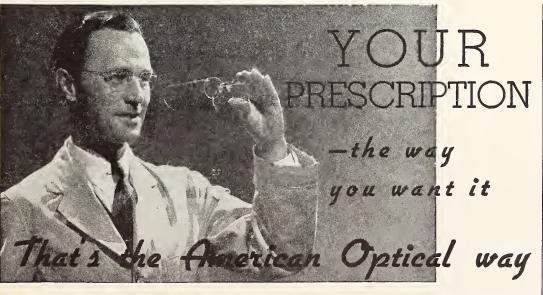
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AMERICAN OPTICAL Laboratory Service University of Oklahoma, School of Medicine, in collaboration with Winifred R. Sink, R.N. Educational Director, Grace Hospital School of Nursing, Detroit, Michigan. Second Edition, published by The C. V. Mosby Company, St. Louis, at \$3.50 per copy. Octavo 379 pages, with 195 illustrations. Cloth. The author in the preface to this edition states that some of the material has been written in more detail; the chapter on physical therapy has been made more complete; additional information on orthopedic measures which may be left to the nurse's care has been added; the subject of fractures has been revised and additional instruction given on operating room technic.

METHODS OF TREATMENT—By Logan Clendening, M.D., Clinical Professor of Medicine, Medical Department of the University of Kansas, with chapters on special subjects by H. C. Andersson, M.D.; Ursulla Brunner, R.N.; J. B. Cowherd, M.D.; Paul Gempel, M.D.; H. P. Kuhn, M.D.; Carl O. Rickter, M.G.; F. C. Neff, M.D.; E. H. Skinner, M.D.; E. R. DeWeese, M. D.; and O. R. Withers, M.D. Sixth Edition, published by The C. V. Mosby Company, St. Louis, Missouri, at \$10.00 per copy. Octavo 879 pages with 103 illustrations. Cloth. The revision of the present edition has been made to conform to the eleventh edition of the United States Pharmacopoeia: The chapter on artificial pneuumothorax in tuberculosis has been rewritten; discussions of protamine zinc insulin, scarlet fever streptococcus immunizing toxin, staphylococcus toxoid, pertussis vaccine, cyclopropane anesthesia, mandelic acid, sulfanilamide, and treatment of delirium tremens have been added.

MANUAL OF HUMAN DISSECTION—By Edwin M. Shearer, Ph.D., Associate Professor of Anatomy, New York University College of Medicine. Published by P. Blakiston's Son & Co., Inc., Philadelphia, Pennsylvania. Octavo 321 pages with seventy-nine original drawings by the author. Cloth. A laboratory guide to the dissection of the human body. The author in the preface states that the aim of the book is to point out to the inexperienced dissector what structures he can reasonably be expected to see in the time he has, and to give directions as concisely as possible for the procedures to be followed. Designed essentially for use in the dissecting room.

EYESTRAIN AND CONVERGENCE—By N. A. Stutterheim, M.D. (Rand). Published by H. K. Lewis & Co. Ltd., London, England, at 7s. 6d. per copy. Octavo 89 pages. Cloth. According to the author the book is intended for both general practitioners and ophthalmologists.

THE DIAGNOSIS AND TREATMENT OF SEX-UAL DISORDERS IN THE MALE AND FEMALE INCLUDING STERILITY AND IMPOTENCE—By Max Huhner, M.D., formerly Chief of Clinic, Genitourinary Department, Mount Sinai Hospital Dispensary, New York City. Published by the F. A. Davis Company, Philadelphia, Pennsylvania at \$5.00 per copy. Octavo in four parts—Sterility—Importance In General—Masturbation—Other Disorders of the Sexual Functions.

Sulfanilamide, its derivatives, compounds, and preparations should be dispensed on physicians' prescriptions only, which can be refilled.—The Kansas Pharmaceutical News, Nevember, 1937.

## **AUXILIARY**

Edited by Mrs. W. G. Emery, Press Publicity Chairman

#### PRESIDENT'S MESSAGE

Dear Auxiliary Members:

Your thoughts at this time, I know, are turned toward Christmas shopping. Rushing down town with your list in hand hoping you might accidently find something different, not the usual shirt, tie and sox.

Each year we say, now next year I am not going to have that Christmas feeling of just having stepped off a merry-go-round and do my shopping early but it's the same old story. Personally I never get the Christmas spirit until one of our toy departments have "open house" with a Santa Claus and everything. So before the rush is on I want to say to each auxiliary member, "Merry Christmas and a Happy New Year." Wishes too that this may be a most favorable year for the advancement of the work of The Kansas Medical Auxiliary.

Facing the dawn of a new year, let us remember

Behind us is infinite power;
Before us endless possibility;
Around us boundless opportunity.

Mrs. R. W. Urie.

### WHY READ HYGEIA

Mrs. Earl F. Clark

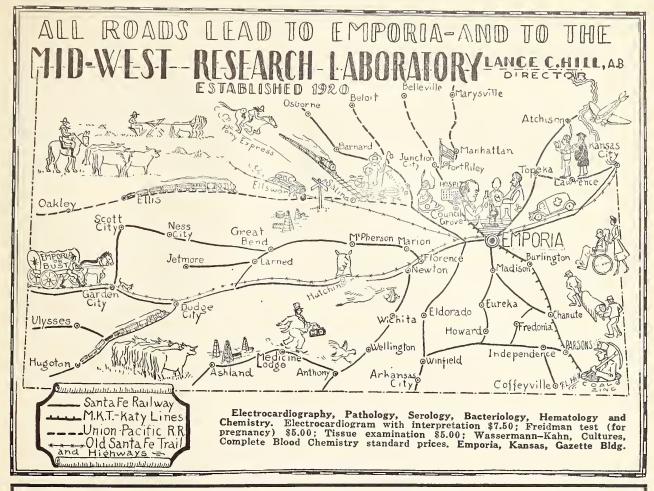
Last evening while sitting on the porch reading Hygeia, little Nancy a six year old, came along and said, "How are you?" I said, "Fine, how is school?" She said "now isn't that funny, everybody asks me how school is, instead of how I am".

Inquiring of one's health is just a mere greeting, but everybody is vitally interested in their health, and the average layman is ignorant of many of the fundamental principals of health and their avenues of information are very limited.

The American Medical Association saw this great opportunity to inform the layman on scientific facts, so they are publishing. Hygeia, a health magazine, written in plain English that a child can read and understand, but its information is authentic. It defines health for us and warns us regarding quacks, faddists and cultists. Hygeia teaches us how to form health habits and it is much better than a text book because it is published each month and has new up to date methods presented in a very interesting way.

The physician is interested in Hygeia, because he is part of the American Medical Association and this is his best method of giving his community reliable information on health facts.

Mothers will find much of interest to them as Hygeia gives excellent instructions on many subjects for infants, pre-school and adolesence ages. It tells much about the complicated question of diet and gives many valuable recipes and tells what to do and what not to do in regard to many problems. Teachers will find Hygeia a solution to an endless number of whats and whys. Our youths are our most ardent seekers of health. Hygeia has



With our hearts full of gratitude we extend to you the Season's Greetings—

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many articles about summer camps, athletics and different kinds of recreation for the youth.

Read Hygeia because it is a real health magazine published by the American Medical Association for the non-medical public.

The November meeting of the Shawnee County Auxiliary was held at the home of Mrs. Floyd Taggart. After routine business Mrs. Theron Hunter reviewed the play "You Can't Take It With You," following which tea was served. Mrs. Taggart was assisted by Mrs. James Bowen and Mrs. Theron Hunter.

The Wyandotte County Auxiliary met at the club house of the council of clubs the afternoon of November 5. The president, Mrs. Omer West, conducted the business session, after which Mrs. A. E. Hildebrand reviewed the book "And So Victoria." A tea and social hour followed.

The Wichita press, in announcing the officers and committees of the Sedgwick County Auxiliary describes that organization as one of the most active social groups in the city. The official list is as follows: President, Mrs. Wilfred Cox; Vice President, Mrs. B. C. Beal; President-Elect, Mrs. M. O. Nyberg; Recording Secretary, Mrs. V. L. Scott; Corresponding Secretary, Mrs. E. E. Tippin; Treasurer, Mrs. James Hibbard. Mrs. C. R. Burkhead leads the Nominating Committee, Mrs. E. J. Nodurfth, the Social Committee; Mrs. D. W. Basham, the Program Committee: Mrs. N. L. Rainey, the Membership Committee; Mrs. George Cowles, the Public Relations Committee; Mrs. J. W. Bierman, Hygeia Committee; Mrs. Frank Emery, Press-Publicity Committee. The fall season of the Sedgwick County Auxiliary opened October 11 with an afternoon tea at the home of Dr. and Mrs. E. E. Tippin in Eastborough. Mrs. Wilfred Cox, president, gave the welcoming address and introduced the new officials and chairmen. Dr. H. R. Hodson, treasurer of the Sedgwick County Medical Society spoke briefly, extending greetings from the medical society. Other portions of the program consisted of a musical poem by Miss Alice Campbell Wrigley, Miss Frances Ebright and Mr. Floyd C. Tomkins. Attractive year books for the current season were distributed. Mrs. J. F. Gsell and Mrs. J. W. Shaw presided at the tea table.

Members of the Sedgwick County Auxiliary take an active part in League of Women Voters. Many auxiliary members participated in a recent tea of that organization.

The opening fall luncheon of the board members of the Sedgwick County Auxiliary was held recently at the Innis Tea Room in Wichita. Plans for this year's activities were outlined.

The Labette Auxiliary met at the home of Dr. and Mrs. T. D. Blasdel on October 27. Two new members were introduced. Mrs. Drake of Wichita was a guest. The theme of the roll call was the quarrantine laws of

Kansas for scarlet fever. Mrs. Ruble gave an interesting paper on "Women In Science."

Mrs. E. J. Nodurfth, state chairman of exhibits, wants every county auxiliary represented by an exhibit at the next state meeting. Believing it is not too early to prepare, she asks each auxiliary to submit at least a year book or scrap book for exhibition. Exhibits illustrative of aims and accomplishments will be most welcome. Our exhibits should demonstrate the growth and increasing value of our organization.

The November meeting of the Wilson County Auxiliary was held in Neodesha at the Brown Hotel. After a dinner served both to the medical society and auxiliary the auxiliary met in business session. Mrs. B. P. Smith, president, presented Mrs. Lynn Beal of Fredonia, who discussed "The Child Health Association." The Wilson County Auxiliary announces a new member, Mrs. Frank L. Moorhead, of Neodesha. The membership now is one hundred per cent.

Mrs. D. W. Basham gave the book review at the meeting of the Queen's Daughters held recently in Wichita.

Members of the Sedgwick County Auxiliary attended a luncheon held recently in the home of Mrs. C. H. Warfield. Each member brought an heirloom or keepsake and recounted the history of it to carry out the treasure chest theme.

Mrs. H. N. Tihen and Mrs. J. J. Brown, Jr., are two of the new members of the Women's Board of Wesley Hospital, Wichita.

The Labette County Auxiliary announces the following committees: Program, Mrs. C. E. Miller; Membership, Mrs. R. W. Urie and Mrs. George Maser; Social, Mrs. G. V. Hay, Mrs. T. D. Blasdel and Mrs. J. D. Pace; Hygeia, Mrs. M. C. Ruble and all auxiliary members; Publicity and Scrap Book, Mrs. J. T. Naramore; Public Relations, Mrs. N. C. Morrow; Legislative, Mrs. O. H. Ball and Mrs. H. C. Markham; Historian, Mrs. C. S. McGinnes; Nominating, Mrs. T. D. Blasdel and Mrs. M. C. Ruble; Doctor's History, Mrs. T. D. Blasdel and Mrs. H. C. Markham; Advisory, Dr. N. C. Morrow and Dr. T. D. Blasdel.

Mr. F. V. Cargill, Circulation Manager of Hygeia, announces that the sum of one hundred fifty dollars in cash prizes will be given by the American Medical Association to the auxiliaries securing the largest number of subscription credits to Hygeia during the months of December and January. It will be possible to again offer Hygeia to physicians during the month of December at a one-half rate of \$1.25 per year.

Mrs. James D. Lester, National Hygeia Chairman, reports that her four star program will be as follows:

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The annual meeting of the American Public Health Association was held October 5-8, in New York City.

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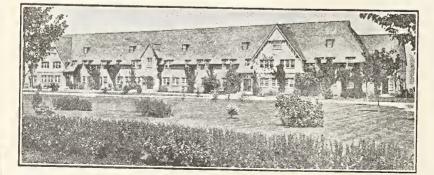
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